Biodiversity Analysis and Technical Support (BATS) for USAID/Africa

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FY2014 Work Plan

for the

Africa Biodiversity Collaborative Group (ABCG)

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Submitted by World Wildlife Fund on behalf of ABCG member organizations

Acronyms

ABCG ..... Africa Biodiversity Collaborative Group
AWF ..... African Wildlife Foundation
BATS ..... Biodiversity Analysis and Technical Support Program of USAID/AFR/SD
BBOP ..... Business and Biodiversity Offsets Programme
CAMPFIRE ..... Communal Areas Management Program for Indigenous Resources
CARPE ..... Central Africa Regional Program for the Environment
CBFM ..... Community Based Forest Management
CCBA ..... Climate, Community and Biodiversity Alliance
CI ..... Conservation International
DRC ..... Democratic Republic of Congo
FAO ..... Food and Agricultural Organization of the United Nations
GKMGE ..... Greater–Katavi–Mahale–Gombe Ecosystem
GME ..... Greater Mahale Ecosystem
GRASP ..... Great Apes Survival Partnership
IEEA ..... Indigenization and Economic Empowerment Act
IUCN ..... International Union for the Conservation of Nature
JGI ..... the Jane Goodall Institute
LAFR ..... Local Authority Forest Reserve
MENTOR ..... Mentoring for Environmental Training in Outreach and Resource conservation fellowship program
PFM ..... Participatory Forest Management
RSPO ..... Roundtable on Sustainable Palm Oil
SSC ..... IUCN Species Survival Commission
TNC ..... The Nature Conservancy
USAID ..... US Agency for International Development
WASH ..... Water, Sanitation and Health
WCS ..... Wildlife Conservation Society
WRI ..... World Resources Institute
WWF ..... World Wildlife Fund

ABCG BATS II WORK PLAN FY2013

Project Overview

The Africa Biodiversity Collaborative Group (ABCG) has received an extension for its work on the Biodiversity Analysis and Technical Support (BATS) from USAID/Africa. The five-year $7.2 Million associate award provides technical support and enables ABCG to share lessons learned to assist USAID/AFR/SD, Africa Missions and local and national organizations in Africa increase their effectiveness to tackle major existing and emerging threats to Africa's biodiversity and contribute to sound development based on wise use of natural resources and maintenance of ecosystem services.

ABCG is a coalition of the major US-based international conservation non-governmental organizations (NGOs) with field-based activities in Africa including African Wildlife Foundation (AWF), Conservation International (CI), the Jane Goodall Institute (JGI), The Nature Conservancy (TNC), Wildlife Conservation Society (WCS), World Resources Institute (WRI) and World Wildlife Fund (WWF). ABCG has extensive experience conducting analysis and sharing lessons learned on high priority conservation issues affecting Africa. ABCG's mission is to tackle complex and changing conservation challenges by catalyzing and strengthening collaboration, and bringing the best resources from across a continuum of conservation organizations to effectively and efficiently work towards a vision of an African continent where natural resources and biodiversity are securely conserved in balance with sustained human livelihoods.

The BATS program develops practical documentation of USAID's biodiversity conservation experience and resulting best practices and policy considerations, coordinates extractive industry activities with conservation initiatives, provides technical assistance for biodiversity conservation programs in conflict, crisis and failing states, conducts biodiversity and tropical forestry country-level assessments, and identifies and conducts analysis and outreach on emerging African conservation issues. This project serves as a support facility that provides services to meet mission and partner needs in:

- Reviewing USAID/Africa's conservation history, lessons learned, and way forward (Task A)
- Managing Extractive Industries to Protect Biodiversity, including a new focus on High Conservation Value Forest Assessments and Risk Assessment for Biodiversity (Task B)
- Analyzing Biodiversity Conservation and Governance to Prevent Conflict and Crisis (Task C)
- Supporting country-level 118/119 biodiversity and tropical forestry assessments, including threats, analysis, and actions necessary for biodiversity conservation (Task D)
- Integrating Approaches to Food Security and Biodiversity (Task E)
- Addressing Global Climate Change Through Adaptation and Actions in Woodlands, Grasslands and Other Ecosystems (Task F)

- Global Health Depends on Biodiversity (Task G)
- Conducting analysis and outreach on future paths for biodiversity conservation in Africa to inform future strategies (Task H).

BATS is being carried out by the USDA Forest Service International Programs (FS/IP), Environmental Law Institute (ELI) and ABCG. ABCG's activities build upon the efforts of these partners.

Threats

Key impacts of threats to biodiversity in Africa are species loss, habitat loss and fragmentation, and disruption of ecosystem services. Major direct habitat threats include impacts related to increased logging and extraction of other natural resources, unmanaged fire, effects of invasive species, and overgrazing. Direct threats to animal species come from loss of range, biological invasion, and unsustainable hunting. Predicted changes in the global climate as a result of greenhouse gas emissions are now measurable. These changes will in some cases constitute direct threats (e.g., changing precipitation patterns and temperature increases) and will potentially magnify other biodiversity threats (e.g., invasive species, unmanaged fire, population dislocation and environmental refugees). While air and water pollution is not a major threat at a continental level, it is very serious in certain sites and countries, and is a growing problem in the face of expanding industries, especially mining, with globalization of trade.

The drivers and root causes of these threats include poor governance, limited capacity for regulation and enforcement, inequitable access to land and resources, absolute shortage of land, insecurity and conflict; trade impacts at many different levels, including poor standards and practices; population growth; poverty, food insecurity, and poor health; and diseases such as HIV/AIDS and malaria.

Extractive industries, while having the potential to bring great economic benefits to Africa, have direct and indirect impacts on biodiversity, air, water, soil, and people. Direct impacts of mining and oil/gas extraction include: deforestation and habitat destruction, alteration of flow regimes and water quality in wetlands through water extraction and pollution from tailings and dumping of wastes. Extraction of forest, fish, and soil and water resources (e.g., through industrial agriculture for global markets, a growing problem) has the potential to result in wide-scale land use/land cover change, with concomitant risks of erosion, degradation of watersheds, depletion of water necessary for environmental flows, and ancillary pollution (e.g., through the use of fertilizers and agricultural chemicals).

Indirect impacts of extractive industries include increased access to undeveloped areas leading to immigration and new settlements; introduction of non-native species; and new markets for illegal logging and bushmeat trade. The soils of the Congo Basin, and in particular those of the DRC, also contain very important mineral resources. These resources provide significant revenues for the region's (very poor) countries. The impact of mining on the Congo Basin is growing. High mineral prices and demand are encouraging the development of mineral deposits, including some previously unviable. And companies are increasingly willing to invest substantial resources into developing mineral fields. In order for these projects to be viable, they need to be accompanied by major infrastructure constructions, such as roads, railway lines and power stations.

The conservation of wildlife outside protected areas in East Africa is influenced to a large degree by **governance and the land tenure systems** in the countries. For Kenya, conservation

efforts have proceeded against a constitutional and legal framework that places restrictions on innovative approaches due to tenure challenges. Recent constitutional and policy changes in the land tenure and management framework heralds a new dawn for conservation efforts. Conflict over valuable and scarce resources such as land, timber, water, and minerals can play a role in fueling and sustaining conflict (e.g. Sierra Leone, Liberia, and Democratic Republic of Congo; USAID, 2005). Tension over accountability, distribution and access to natural resources and biodiversity is an increasing threat, especially in countries that are vulnerable to crisis, in crisis or emerging from crisis (e.g. Madagascar). The distribution of biodiversity resources often occurs outside protected areas on private land or communal lands more so than inside for a variety of reasons spanning changes in climate patterns to poorly designed reserves (Hannah et al., 2002; Western et al., 2009). This is an area that conservation organizations have been weighing the threats and assessing viable options to conserve biodiversity with local livelihoods in mind. There is a need to better understand the role of natural resources play in conflict in fragile states (including both "rebuilding" and "developing" countries). Sustainable and equitable natural resource management can help to achieve security and stability through sustainable livelihoods, while environmental governance can be a springboard for democracy and governance (USAID, 2002).

Poor rural people often can only improve their **food security** through extensive use of land; a common approach that reflects the desire of farming households to make the best use of limited resources to satisfy current needs, longer-term development aspirations, and reflects larger-scale landscape dynamics. In many situations such extensive land use results in encroachment into areas that are poorly suited to farming, but which contain important wildlife habitats, and/or play an essential role in the provision of ecosystem services upon which people and wildlife alike depend (e.g., the upper portions of watersheds that serve as water towers for both). In this context, the future of both poor rural people and wildlife are tied to the development of new land use options

Sustainable agriculture intensification, through the management of ecosystem processes, can play a significant role in African conservation strategies through the reduction of agricultural expansion and natural habitat degradation and deforestation and loss of biodiversity. With proper governance, incentives and land-use management, this can reduce the pressure to convert forest and natural ecosystems to farmland as yields and returns per unit of family labor increase. Reduced pressure to convert these areas to farmland also opens the possibility of exploring how local communities can participate more fully in the management of this natural patrimony and receive a more diverse array of benefits from these management activities in the form of tourism revenues, payments for ecosystem services, and access to markets that pay premium prices for goods produced in environmentally responsible ways. In many cases, the potential of these activities to generate income for rural people far exceeds the income-producing of farming.

Understanding trade-offs and synergies between food security and conservation is essential for sound planning and management decisions. Unfortunately, in the absence of concrete proposals, and the means to implement them, incompatible land use often causes extensive

damage to wildlife and their habitats, and over time often adds to the food insecurity experienced by vulnerable people.

Climate change, and its impacts on ecosystems and people, is likely the biggest threat to biodiversity conservation in Africa.

The progress achieved by conservation efforts in Africa over the course of many decades is increasingly threatened by climatic changes forced by increasing greenhouse gas concentrations and land surface changes. According to the Intergovernmental Panel on Climate Change (IPCC, 2007), many parts of the African continent have high vulnerability to climate change-related stresses, and yet have a very low adaptive capacity. It is now widely recognized that climate change will exacerbate existing environmental degradation in Africa, threatening the rich diversity of plant and animal species as well as the livelihoods of large populations of subsistence farmers, pastoralists, and even urban dwellers who rely on rural ecosystem-derived ecosystem services for their water, electricity, and sustenance.

As described in the IPCC Fourth Assessment Report (2007), global climate models based on a range of greenhouse gas emissions scenarios predict a 2-5 degree Celsius rise in temperature throughout tropical Africa over the next 50-100 years. The warming climate will be attended by changing rainfall patterns, changes in seasonality and an increase in the frequency of severe storm events, setting up further obstacles to the challenges of conserving biodiversity and the ecosystem services that people depend upon. On the human side, failing rains, increased flooding, and shifting conditions for key subsistence crops (e.g., coffee and cocoa), natural resource species, and ecosystem services are expected to have profound impacts on many of Africa's people, with the poor and marginalized being particularly vulnerable (e.g. Ehrhart, 2009). The number of climate refugees will increase significantly over the next decade; this in turn is likely to exacerbate pressures on biodiversity and accelerate environmental degradation (e.g. Warner et al., 2009).

The growing certainty over the seriousness of climate change threats to Africa has prompted responses across a spectrum of interests in conservation and development. These concern both mitigation efforts to slow the rate of change through actions such as reducing greenhouse gas emitting practices like deforestation; and adaptation efforts to change existing practices and planning to produce more sustainable outcomes in the face of increasing climatic stress.

Woodland is an important ecosystem in Africa with important plant and animal biodiversity. Currently, these woodlands are being decimated at an unprecedented rate. The **loss of woodlands** will have a serious impact on biodiversity and greatly contribute to ongoing carbon emissions, but also impact our ability to mitigate climate change in the region. Therefore, it is important to identify priority areas for woodland conservation, which will give the greatest return on our limited conservation resources. Such interventions also have a low social cost as well as the potential to secure woodland connectivity in response to climate change and human pressures. Besides human pressure ongoing climate change will impact the occurrence and viability of woodland. With increasing drought stress woodland will give way for shrub- or

grassland. Fragmentation and reduction of woodland with climate change will affect biodiversity, carbon sequestration and storage, and ecosystem services for wildlife and rural communities.

Renewable clean energy is a priority for sustainable development and is included in the Global Climate Change Initiative and several UN conventions. Speaking at the Fourth World Future Energy Summit, the UN Secretary-General reinforced the reality of a 40% increase in energy consumption over the next two decades, mostly in developing countries, where 1.6 billion people still lack access to electricity, and where 3 billion people rely on traditional biomass fuels for cooking, heating, and other basic household needs. The use of these traditional energy sources results in forest degradation and negatively impact climate change, through reduced carbon sequestration and increased GHG emissions. Additionally, they present a public health challenge from indoor air pollution (World Health Organization, 2011). The negative impacts stemming from this situation highlight the importance of investing in sustainable and accessible green technologies.

Africa's rapidly increasing human population is driving increased pressure on the continent's **grasslands** to produce more livestock for milk and protein. More intensive grazing and failing pastoralist systems in Africa's rangelands are now exacerbating rangeland degradation—in areas that are particularly vulnerable to climate change. In northern Kenya, rangeland degradation is the leading threat to pastoral people and wildlife living in and depending on these semi-arid grasslands for their survival.

Habitat degradation can lead to the loss of carbon stored in these same habitats. Forests, wetlands, grasslands, and agricultural systems store a significant portion of global carbon stocks in plants and soil. Depending on how landscapes are managed, they can either store more carbon (a carbon "sink") or they can release carbon dioxide into the atmosphere (a "source" of carbon). Fire, a carbon source, also plays a dynamic role in pastoralist systems. Thus, how landscapes are managed can influence how well they serve to reduce global atmospheric levels of greenhouse gases.

There are new and emerging **global health** threats to conservation efforts in Africa such as the potential environmental impacts of emerging infectious diseases. Possible impacts include loss of tourism revenues, loss of livelihoods and/or food security for local communities, reduction in conservation capacity, and increased use of natural resources and less sustainable land use.

The **HIV/AIDS epidemic** is increasing natural resource use in many areas because of changes in rural household livelihood strategies. Since the most economically active age groups are most affected, loss of employment and labor results in decreased income and agricultural outputs. Scarce financial resources are often spent on medicines, special food and care, and assets are such as draught animals, farm implements and even land may be sold to support medical care. As a result, natural resources often play an increasingly large role in AIDS-impacted rural household economies. Activities such as hunting, fishing, wild food collection, firewood extraction and charcoal-making increase as families struggle to maintain diets and generate

alternative income. Medicinal plant harvesting increases to treat opportunistic infections of AIDS, and logging accelerates to supply the growing coffin industry. These widely reported increases in natural resource use are often not sustainable and can put increased pressure on protected areas as neighboring communities seek access to resources. Efforts are needed to mainstream ways to mitigate the impacts of HIV/AIDS on Africa's natural resources. The conservation sector needs to share coping strategies, lessons learned and best practices widely in order to engage with other sectors such as health, agriculture, and food security to use multi-sectoral approaches to deal with the impacts of HIV/AIDS. AIDS orphans who grow up without ties to the land and who do not know how to use natural resources sustainably can present a future security risk. These vulnerable youth need training on indigenous knowledge of sustainable land use management and need supportive policies that allow them to stay on their land as well as educational and economic opportunities such as through ecotourism development.

Humans depend upon healthy freshwater ecosystems for sustaining the provision of multiple services over the medium and longer term—including providing drinking water, sanitation and hygiene benefits. Ecosystem services support some 126,000 species, and these systems can be affected by **WASH (Water, Sanitation and Health)** projects—either degraded or enhanced depending on how they are designed and implemented. Water, poverty and environment are intrinsically connected. Areas of high endemism and biodiversity are usually relatively remote and as a result human communities living in close proximity to these areas tend to be impoverished with little to no access to improved water sources and sanitation facilities. Conversely, in the downstream reaches of rivers, acute water shortages are becoming the norm in some areas as the myriad stakeholders take up water to meet their disparate needs e.g. heavy industry, irrigation for agriculture, fisheries, tourism, and municipal water and electricity utilities. The impacts on human health linked to the lack of access to improved water and sanitation facilities range from water-borne diarrheal diseases such as typhoid, giardia and cholera to water-washed diseases such as roundworm, trachoma and scabies.

Large-scale land acquisition: Following the spike in commodity prices in 2007-2008, media reports revealed that investors (e.g., government, international companies, venture capitalists) had expressed interest in 56 million ha of land for agriculture and forestry production in less than one year[1]. Sub-Saharan Africa accounted for 2/3 of this expressed demand. Despite the poor record of large agricultural investments in Africa and parts of Asia, the global median project size of 40,000 ha implies that these investments could have major implications for rural land use and existing land users, especially smallholders. Alarmingly, countries with weak legal frameworks for recognizing rural land rights and poor business environments were those most likely to be targeted by recent large land investments (Deininger et al., 2011).

As oil prices creep up, natural disasters affect farm outputs in other parts of the world and other factors, large-scale land acquisitions by foreign actors for agriculture development (food and biofuel crops) are again on the rise in Africa and are having profound effects on natural

[1] Compared with an annual average growth in the global cultivated area of just 1.9 million ha.

environments, critical ecosystem services and biodiversity. Land is being allocated to grow food and biofuel (*e.g.*, palm oil, sugar cane, jatropha) crops, principally for export to promote food security in importing country (*e.g.*, Saudi Arabia, China, Bangladesh), to generate profits, and to meet the demand of biofuels in the west.

Considerable attention has focused on Ethiopia, Madagascar and Sudan, but other African countries are also allocating large plots of. In Kenya, land in the Tana Delta is being allocated for sugar cane plantations, displacing hundreds of families and destroying one the Africa's most important bird habitats (McVeigh, 2011). In Tanzania, a recent South African acquisition in the foothills of Mt. Kilimanjaro has been fenced, significantly disrupting wildlife movements between the Arusha, Kilimanjaro and Amboseli parks and creating new problems for the Maasai. And in Cameroon, DR Congo and Congo (Brazzaville), natural forest is being allocated to foreign companies to develop large palm oil plantations.

Conservation of biodiversity in public, private and community lands requires: a) the formulation of institutions or norms that regulate access to and meter use of natural resources; and b) enforcement of these rules and regulations. In many **countries enforcement of laws designed to conserve biodiversity** is weak. As a result, biodiversity is being lost at an unrelenting pace (Hoffmann et al., 2010). Failure to enforce laws in many public, private and community protected areas is a result of several contributing factors: 1) insufficient staff dedicated to law enforcement; 2) law enforcement staff lack the skills, experience, information and motivation needed to plan and implement law enforcement efforts; and 3) law enforcement agencies lack the funds to cover the costs of implementing law enforcement plans. A frequent barrier to effective law enforcement is not the lack of staff or funds, but rather the lack of skills, knowledge and motivation to plan and implement successful law enforcement efforts. This is true for national protected area staff and community rangers.

The **Western Indian Ocean** region presents challenges that are different from other regions. The marine and coastal ecosystems of these countries share common characteristics. Their respective coastal environments are under similar human pressures and are experiencing the effects of similar natural phenomena in the region, including climate change, the influence of marine currents at the south of the Equator and the impacts of monsoon winds or cyclones which particularly affect the island countries. Moreover, the majority of fishers in the Western Indian Ocean (WIO) region are small-scale operators working from shore. Climate change poses risks to their fishing operations on many fronts, from shifts in species distributions and productivity, to changes in ocean chemistry that affect ecosystem health, to more extreme weather events that destroy infrastructure and productive assets. Small-scale fishers can adapt to climate variability by shifting location, species caught, or levels of investment in fishing and competing options, but these individual responses will not be sufficient to boost food security across the region. Development programs have generally poorly served small-scale fisheries, and fishing communities have often been excluded from coastal planning and resource management. At the national and regional levels, fisheries are under pressure from increased harvesting rates, inequitable and poorly governed trading relations with external and global markets, and ever-greater pressures from competing uses. Furthermore, market chains for many species are not

well characterized and trade policy and the costs of adapting to climate change have not been evaluated. Management measures to maintain fish stock and environments are often weak, and undermine the ability to construct climate-resilient fisheries systems. Better integration of small-scale fisheries into development processes, climate change adaptation investments, fisheries and coastal governance and knowledge systems can all help to improve the living and working conditions of fishers, and reduce their vulnerability to economic hardship.

Through regional frameworks such as the Nairobi Convention and Indian Ocean Commission, integrated management of coastal and marine resources has been identified as a common concern for all the south west islands of the Indian Ocean and the coastal countries of East Africa. Collaboration between institutions, information exchange and the sharing of experience and resource management tools will enhance regional cooperation and economic integration.

The Dar Vision recognized that, "Faith-based communities comprise the largest social organizations in Africa, representing a repository of opportunities to spread the cause for sustainability in the continent," and encourages conservation leaders to "reach out to religious communities to collaborate in implementing these recommendations, with a view to enhancing the capacity for value-based sustainability decisions that link nature and human well-being." Following an ABCG meeting on **Faith and Conservation in Africa**, ABCG seeks to further explore the opportunities, challenges and potential partnerships among faith and conservation groups. Faith groups can play a critical role in responding to illegal wildlife trade, one of the most immediate challenges for conservation in Africa. Illegal wildlife trade (for ivory, bushmeat, medicines or luxury products traded globally) threatens the very survival of wild populations of species such as elephants, rhinos and great apes. The demand for these products is so great that the impact on wild populations is staggering: rhino poaching in South Africa increased by more than 3,000% between 2007 and 2011 and up to 12,000 elephants are killed each year for their ivory, most in Central Africa, all headed for Asian markets.

Goal

The goal of ABCG's BATS component is to support USAID AFR/SD, Africa Missions and African organization partners to increase their effectiveness to tackle major existing and emerging threats to Africa's biodiversity and contribute to sound development and security based on wise use of natural resources and maintenance of ecosystem services.

OBJECTIVES

Undertake analysis, provide technical support, and conduct outreach in Biodiversity Analysis and Technical Support (BATS) over a five-year period by:

- Equipping USAID field missions and African partners with lessons learned
- Facilitating continued dialogue on the future of biodiversity in Africa
- Provide analysis, capacity building, and technical support on ways to reduce biodiversity impacts from extractive industries
- Analyzing biodiversity conservation and governance issues to prevent natural resource conflicts
- Investigating multiple approaches to global climate change, including scaling up climate change adaptation, evaluating tradeoffs in climate planning in woodlands ecosystems, improving pastoralist grazing management practices linked to carbon sequestration in grasslands, and scaling up clean energy practices.
- Supporting scaling up integration in land use planning as means to ensure a more comprehensive farming systems approaches linked to natural resources management with a focus on ecoagriculture, including bushmeat as an important element of incorporating protein into food security.
- Equipping governments, NGOs and partners to better address the intersections of global health challenges and biodiversity
- Forecasting future conservation needs and opportunities in Africa by identifying selected critical and/or emerging conservation issues and linkages in Africa as priorities for future USAID and donor support in order to better prepare the conservation sector and in some cases follow up directly or catalyze actions by others
- Conducting continued outreach on BATS products.

Major themes for analysis and technical support proposed through the BATS extension include:

Task A:	Facilitating Discussions on the Dar Vision on the "Future of Biodiversity in Africa"
Task B:	Managing Extractive Industries to Protect Biodiversity, including a new focus on High Conservation Value Forest Assessments and Risk Assessment for Biodiversity
Task C:	Land Tenure and Biodiversity—Analyzing Biodiversity Conservation and Governance to Prevent Conflict and Crisis
Task D:	Supporting Country 118/ 119 Operational Plans Biodiversity and Tropical Forestry Assessments
Task E:	Integrating Approaches to Food Security and Biodiversity
Task F:	Addressing Global Climate Change in Through Adaptation and Actions in Woodlands, Grasslands and Other Ecosystems
Task G:	Global Health Depends on Biodiversity
Task H:	Forecasting and Analyzing Conservation Needs and Building Capacity on Critical Issues

These themes were drawn out by the conservation NGOs as priorities for action. They have been highlighted through the Dar Vision process and series of BATS workshops that ABCG has organized in both the U.S. and Africa where African conservation experts, conservation NGOs and partners have discussed on "The Future of Biodiversity in Africa". These themes build upon the first phase of BATS activities. The BATS extension continues to emphasize analysis, outreach, capacity building and communications efforts. ABCG proposes to help USAID, Missions and African partners by conducting activities such as: 1) threat and footprint analyses, 2) legal, institutional, and policy analyses, 3) financial and socio-economic analyses; 4) training and capacity building; 5) operational research and technical support, and 6) outreach and networking.

Through ABCG, the major US-based conservation NGOs working in Africa will exchange information about activities on these themes and seek opportunities to work together and create synergies. Through BATS support, ABCG will facilitate the sharing of lessons learned to deal with new global trends and emerging impacts on biodiversity conservation in Africa in order to inform future USAID and partners' action. We will seek to build capacity of African partners on emerging and high priority conservation issues. The BATS extension will enable ABCG to continue and expand our outreach with African partners on forthcoming and already completed BATS products. We will continue to provide technical support and share lessons learned to assist USAID/AFR/SD, Africa Missions and local and national organizations in Africa to increase their effectiveness to tackle major existing and emerging threats to Africa's biodiversity. We seek to help facilitate actions that will help to realize the Dar Vision.

In this work plan, some activities will be undertaken by ABCG as a whole, and others by groups of members coming together to work on the specific components of BATS.

PROGRAM DETAILS

Task A: 25 Year Biodiversity Assessment and Path Forward

Task A will not include any continuing activities for FY2014 due to funding limitations in favor of other priority tasks, and the approaching BATS–ABCG current agreement close-out.

Level of Effort:

$0

Goal:

To support USAID and partners in increasing their effectiveness through improved knowledge of the history and lessons from USAID's investments in biodiversity in Africa, and greater awareness of emerging challenges to biodiversity conservation in Africa

Task B: Managing Extractive Industries to Protect Biodiversity

1.D. Enhance greater accountability for sustaining biodiversity and ecosystem services by private sector institutions (including developing alternatives; promoting fuel efficiency and alternative energy sources; and limiting pressure on freshwater sources through more efficient uses of water) (Dar Vision 2008)

Goal:

To provide analysis, outreach, and capacity building on ways to reduce biodiversity impacts from extractive industries in order to increase USAID and their partners' access to sound guidance and hence lessen the effects on biodiversity of future investments in the major extractive industries.

Task B.1: Mining and Biodiversity in Democratic Republic of Congo

Task B.1 and its activities will not be pursued for FY2014 as agreed by the member organizations.

Task B.2: High Conservation Value (HCV) Forest Assessment

Level of Effort:

FY2014 USAID Support: $95,436

Background:

With the current scramble for natural resources in Africa, the expansion of industrial activities (palm oil, industrial-scale agriculture, logging, transport infrastructure and mining) is an increasing threat to biodiversity. These impacts can be reduced or prevented by a careful process of land-use planning that identifies sensitive areas. The High Conservation Value approach identifies types of high conservation values and provides guidelines for how they should be evaluated. Such information is important for both the conservation community and extractive industries. The HCV approach is referred to by the major certification schemes (e.g. FSC, RSPO & CCBA) and leading development bank safeguards (e.g. IFC Performance Standard 6). In Gabon the National Parks Network is considering using the HCV approach to identify 'sensitive areas' of park buffer zones and this approach could also be used at a larger scale to identify biodiversity sensitive areas in a regional or national land-use planning process.

However, application of the HCV approach in Africa is problematic because in many areas there is a lack of accurate data on flora and fauna, limited experience in conservation planning, and no consensus on how to set thresholds of significance consistent with the concept of High Conservation Value.

Central Africa presents one of the prime cases. At a macro scale a planning process was undertaken for the initial delineation of the CARPE Landscapes. This analysis was based on the best data available at the time, however with advances in technology and data availability these could now be refined. While the CARPE-supported process is having significant success at conserving these large, intact landscapes, it is clear that: 1) the growing threat from oil palm is chiefly in areas outside these landscapes, and 2) there are smaller, but still very significant, pockets of biodiversity remaining outside the CARPE Landscapes.

At a micro-level, while the HCV approach provides a broad framework for identifying areas that require special conservation attention, there is little detailed guidance on how HCV criteria should be applied, leaving them largely open to interpretation. In a situation where there is limited spatial data on biodiversity available publically, and where there is very limited capacity to critically evaluate HCV assessments, the framework is prone to weak application. In a recent example, a logging company identified an eroded hillside covered with an exotic species of fern as a zone of high conservation value, leaving an adjacent area of exceptional botanical diversity to be logged.

In the meantime, the Gabonese government is expanding its economic activities, including the development of palm oil plantations. In the absence of a plan for the allocation of concessions, conversion to plantations will have a devastating impact on biodiversity. High priority conservation areas, not already identified during and conserved by the CARPE process, need urgently to be identified, to guide the allocation of plantation development.

If the HCV approach is to be effective in orienting development decisions to maximize retention of biodiversity, the application of the approach needs to be better informed by:

- Scientifically robust and transparent mapping of basic biodiversity parameters
- Experience from implementation in other countries (e.g. other national toolkits) and from
- The lessons from international standards (e.g., IFC Performance Standard 6, IUCN Best Practice Guidelines)

The first year of the project focused on preparing the ground. In March 2012, WWF and WCS organised a 2-day working session, to provide basic training on the HCV concept and to brainstorm about a biodiversity priority setting methodology for Gabon. The group decided to look at 4 ecological parameters in order to define HCV areas in Gabon:

- Large mammal distribution and abundance
- Endemic plant hotspots
- Forest habitat type mapping
- Aquatic biodiversity

The objective has been to improve the data building blocks of good decision making. CI has carried out a review of techniques and approaches to setting conservation priorities, and looked at the use of threshold values in HCV toolkits from other regions (to be available end July 2012). A spatial model of elephant distribution and abundance has been completed and is awaiting publication, and similar work is underway for great apes. A considerable effort has been made to improve our understanding of the distribution of endemic plants, in order that hotspots of endemism can be identified. Forest inventory data has been compiled to allow for the development of an approach to forest habitat mapping.

Goal:

The aim of this project is to establish a model approach to setting thresholds for attributes considered to be of High Conservation Value (HCV).

Industry stakeholders interested in voluntary certification under the FSC (forestry) or the RSPO (palm oil) must identify HCV areas, and ensure their attributes are effectively protected. Consensus between NGOs and industry on areas that are High Conservation Value is therefore necessary to meet international definitions of responsible land use, and thus can have a significant impact on government land use planning decisions.

In order to reliably and consistently identify HCV areas, the ***limits and thresholds*** for these HCVs need to be defined and agreed at the national level. For each HCV criteria, it is necessary for stakeholders to agree *when* a given value will be considered an HCV.

The main objective for year III to ensure the data analysis and prioritisation techniques developed and tested under this project are transformed into clear policy and land use planning recommendations. These recommendations should be targeted both at government stakeholders engaged in Gabon's *plan d 'affectation de terres* (land use plan) and the private sector, notably the forestry, and palm oil sectors.

To achieve this, the group must complete the remaining technical/analysis tasks in the first half of the year, to plan for large scale stakeholder engagement from May 2014. The elements of this workplan address four objectives, as follows:

- Completion of technical analysis tasks
- Technical work session to consolidate results
- Write up/publication and diffusion of draft results
- Large scale stakeholder workshop

Work to date

The first year of the project focused on preparing the ground, and building the basic data building blocks for decision making. Four themes were selected for analysis, as follows

- Large mammal distribution and abundance
- Endemic plant hotspots
- Forest habitat type mapping
- Aquatic biodiversity

Work in year I focussed on elephants and endemic plants initial mapping approaches for HCV thresholds were developed and tested.

The second year of the project saw significant advances in the analysis and mapping of all themes. ***Elephant density and abundance*** maps, based on the now published results of Maisels *et al* (2013), were refined and initial analysis of conservation tradeoffs and costs was completed. A similar approach was tested for ***great apes***. Priority maps for endemic plant hotspots were re-visited and statistical analysis of the endemic plant data was made to enable the classification of 3 ***endemic plant conservation zones***. An approach to classifying ***forest habitat*** from forest company's inventory data was developed and tested using data from 14 companies. Sampling of ***aquatic biodiversity*** in Gabon's river systems was completed. Analysis of the data enabled initial mapping of aquatic biodiversity that could form the basis of a conservation prioritisation.

In addition to the pre-existing themes from year 1, an additional work module was added in year II on linking HCV identification and mapping to the use of the biodiversity offsets

approach proposed by BBOP. A draft report on the appropriate metrics for biodiversity offsetting in Gabon has been produced, and is under review.

Year II activities still to be completed

The following elements remain to be completed for the end of year I. The estimated completion date is shown in the table.

Activity	Organisation	Deadline
Improved training module on recommended techniques for faunal and botanical HCV identification	WCS/WWF	Sept 2013
Combined priority setting methodology field tested in the landscape of one national park	WCS	Sept 2013

Activities:

Completion of technical tasks:

Forest habitat mapping

The method used here is based on forest inventory data from logging companies. A draft national scale habitat classification has been produced based on the available data. The projection of the results at the national scale is hampered by the need for additional data from certain locations, notably the south west and the north east of Gabon.

This map will be updated through the analysis of additional data from these two regions. The habitat classification produced will be used in the landscape case study planned for the Mayombe region (see below).

Actions 3.1	Responsible	Deadline
Obtain and analyse inventory data from SW and NE Gabon	Archange Boupaya/Giles Dauby MBG	
Revise national habitat map	Archange Boupaya Giles Dauby/Tariq Stevart MBG	
Exploit habitat map in landscape analysis SW Gabon	Tim Rayden WCS	April 2014

Large mammal mapping updates

Following the completion of the mapping and priority setting initiatives for elephants and great apes, initial results of the great apes priority mapping exercise will be shared with the IUCN SSC and GRASP. Initial feedback from these organisations will be invited in order to refine the approach.

These results can be compared and eventually combined with those obtained for elephants. The use of these layers individually and in combination will be tested at the national scale and in the context of the landscape case study to investigate the implications for priority setting.

Landscape case study

This case study was to be completed in year II, but was not achieved. It is hoped that the necessary analysis can be completed in Jan 2014. The case study will use marxan software to integrate national scale HCV threshold values with landscape scale features to delineate optimal conservation set asides around HCV areas. The approach assigns land units to different end uses based on user-defined priorities such as the predicted biodiversity value, and proximity to existing conservation areas or other irreplaceable features.

The case study is intended to provide a mode of HCV identification and mapping, making use of the data collected and analytical techniques developed for this project.

Actions	Responsable	Deadline
Complete compilation of data layers	Rob Rose/Dan Segan /Tim Rayden	Dec 2013
Analysis using Marxan	Rob Rose / Dan Segan /Tim Rayden + local stakeholders	Jan 2014
Compilation of results and lessons learned and production of case study report	Tim + all partners	March 2014

Aquatic biodiversity prioritisation approaches

Based on the data collected and analysed on aquatic biodiversity in Gabon's river systems that was completed in Yr II, it is now necessary to develop ways to apply priority thresholds to this data and to use it in a conservation planning exercise. The appropriate use of this data will be discussed between WWF and WWF with a view to developing a priority setting approach for use in national planning

Actions	Responsable	Deadline
Discussion of priority setting approaches	Bas Verhage WWF & Malcolm Starkey WCS	Dec 2014
Write up policy brief on use of the data and the approach	Bas Verhage WWF	Jan 2014

Technical work session to consolidate results

Following the completion of the remaining technical tasks above, a technical workshop will be organised in Q2 2014 for an initial presentation of the results. The aim of this technical gathering will be to consolidate understanding of the appropriate methods and approaches, and to prepare communication materials for the wider stakeholder community.

This workshop will be held in Lope National Park, at the WCS conservation training centre. Outputs from the workshop will include an agreed set of methods to present to government and industry stakeholders, together with initial demonstrative results of their use.

Actions	Responsable	Deadline
Agree methods/approaches to be validated	All partners	June 2014
List of communication materials, briefing notes and reports to be produced, with responsibilities defined.	Tim Rayden WCS	June 2014

Write up/publication and diffusion of draft results

Following the technical workshop in Lope, the participants will finalise and write up the necessary reports and communication materials in preparation for larger stakeholder consultation. Draft reports and briefing notes will be circulated for discussion during July and August 2014.

Stakeholder workshop on final results

A workshop will be held in Libreville in September 2014 to present the products and outputs to stakeholders. The primary target audience for the workshop will the private sector (palm oil, and forestry companies, infrastructure development companies, mining companies) and the key governmental regulatory institutions will also be asked to assist.

A representative from Conservation International has been invited to attend in order to provide input from a recent review of guidance documents for identifying and managing HCV areas from 20 countries. Guidance and examples from other countries that have defined thresholds for HCV can support the process of identifying HCV at national and sub-national scales in Gabon. Lessons learned from a review of published examples of applications of HCV in the agricultural sector (including palm oil, biofuels, and soy) will also be shared. The CI representative will also provide information on the links between HCV and other globally accepted approaches to threshold setting, such as those used to identify Key Biodiversity Areas (KBAs).

Break-out groups during the workshop will consider the different threshold setting approaches proposed and critique the results. Feedback from stakeholders will be collated during the workshop, and written up in a final project report in October 2014.

Actions	Responsible	Deadline
Diffusion of communication materials and reports	All partners	July 2014
Agree on dates, invitations and logistics for workshop, including external facilitation	WWF	July 2014
Organisation and execution of the meeting	WWF	Sept 2014

Deliverables:

- Revise and update forest habitat map, and large mammal maps
- Exploit maps in landscape analysis SW Gabon
- Compilation of results and lessons learned and production of case study report for landscape case study
- policy brief on use of the data and the Aquatic biodiversity prioritization approaches
- List of communication materials, briefing notes and reports to be produced, with responsibilities defined following technical work session
- Stakeholder workshop for final communication and results

Task C: Land Tenure and Biodiversity

Level of Effort:

USAID FY2014: $116,914.07

2.D. Promote sound governance and rights-based approaches (promoting rights of local people, sharing benefits, engaging civil building capacity, ensuring stakeholder access to information and decision-making processes, empowering women, undertaking multisectoral approaches and partnerships; and promoting sound policy at all levels) (Dar Vision 2008)

Goals:

- **To study and analyze new land management approaches and tools, the changing land policy regimes and the implications to conservation**
- **To disseminate the research findings and policy/program recommendations, and to promote their adoption**
- **To increase learning on land tenure issues and promote more equitable policies and practices in Africa**
- **To analyze property rights regimes in landscapes and how their impact on community engagement for successful conservation**
- **Determine how land property/tenure rights can be secured for marginalized communities.**

Background

African Wildlife Foundation

Allocation of land for different use is a significant challenge in Africa and has a bearing on conservation success. Land tenure is complicated by dual or even multiple use, access and ownership rights that are often in conflict. In the Zimbabwean context, the government Land Reform process has resulted in numerous contestations that have led to uncertainties for the wildlife conservation sector which became even more complex with the rolling out of provisions of the Indigenization and Economic Empowerment Act (IEEA) (Chapter 14:33) to the wildlife sector. Zimbabwe's SE Lowveld region has some of Africa's best wildlife conservancies that are habitat to the endangered black rhinos, wild dog, elephant and lion. The Save Valley Conservancy is threatened by the reform process and various complications pertaining to the IEEA. To address these challenges, the Government of Zimbabwe's Parks and Wildlife Management Authority requested AWF to help develop a model for conservancies that achieves indigenization, per the IEEA and ecological, social and economic sustainability, and to assess the CAMPFIRE program and Zimbabwe protected

areas, and advise how to improve the viability of the conservation estates. AWF has worked on this since 2010 and in September 2012 shared the findings with the Hon Minister of Environment, Hon Minister of Tourism, and the Parliamentary Committee. Since then to date, AWF has developed a business model for tourism businesses in the Lowveld to incorporate communities into business to achieve ecological, economic and social sustainability and to meet the requirements of the IEEA. Furthermore, in June 2013, AWF was approached by a community who are interested in establishing a community conservancy for wildlife conservation and tourism. AWF has an ecological assessment for this area to determine whether it has ecological viability underway (done using non-ABCG resources).

This cutting edge work provides useful learning for ABCG members as experiences from brokering contested land tenure issues through smart partnership in a quasi-tumultuous governance environment bring to the table lessons that can be applied to different contexts in Africa where young democracies are emerging and land & natural resources become contested capital by default. This work directly resonates with the Dar Vision and ABCG prioritization of land issues. In addition, AWF has applied some of the lessons learned from the Zimbabwe work to the development of conservancies in Uganda.

The Jane Goodall Institute

A study on drivers of deforestation commissioned by JGI in 2010 indicated increasing pressure on natural resources was caused by human activities. The main threats to ecosystem change within the landscape include indiscriminate tree cutting, wildfire, shifting cultivation and settlements, pastoralism and charcoal burning to be among the top five threats (Lyaruu H. V. M, 2010). The underlying factor was the lack of land use planning. Accordingly, Conservation Action Planning exercises conducted by JGI in partnership with The Nature Conservancy (TNC) for Greater Gombe and Masito Ugalla ecosystems identified participatory land use planning in villages as a primary strategy for protecting the chimpanzee population and addressing the primary threats to ecosystem health. Accordingly, JGI under this objective focused on the implementation of participatory land use planning as a strategy for the achievement of both conservation and livelihood outcomes and as a means for resolving long-standing land conflicts between farmers and pastoralist communities. Village land-use planning is also mandated by Tanzanian law (the Land Policy 1995, the Land Act 1999, Village Land Act No.5).

The Tanzania Village Land Act No. 5 of 1999 classifies land in three categories; Village Land, Reserved Land, and General Land. Village land covers all the land within villages and where villagers have rights of access. JGI has been working closely with government officials, building their capacity to facilitate the implementation of a participatory village land use planning process to develop land use plans for villages and to clearly demarcate their territories. Village land use planning has been one of the key strategies for protecting forests and biodiversity and has resulted in identifying village forest reserves, woodlots, agricultural and residential zones, and facilitated the development of village by-laws

governing natural resource management. As a follow up to the village land use plans, JGI facilitated the development of Community Based Forest Management (CBFM) for identified village forest reserves, no interventions were taking place in the vast land outside of village land and that is not designated as reserved land is known as general land[2].

JGI has been advocating for changing the designation of land with high biological significance, especially that which provides habitat for chimpanzees, from *general land into reserved land*. Without this change in designation of these general lands, uncontrolled extraction of forest resources for timber and charcoal, and conversion to agricultural lands will lead to increased forest destruction. From discussions with officials from Mpanda and Kigoma districts, the establishment of Local Authority Forest Reserves (LAFR) was identified as the best way to move forward in changing the designation from general land to forest reserve. Accordingly, JGI initiated the establishment of a LAFR's in Kigoma and Mpanda districts. Establishment of both forest reserves in Kigoma and Mpanda districts is at its final stage and will be finalized before the end of the current calendar year. While the establishment of the LAFR's is a notable achievement, the task of ensuring their proper management and sustainability needs to be initiated through the development of participatory forest management plans that will identify ecological zones and set limits of acceptable use of the forest reserves.

The Nature Conservancy

Over the last two years TNC has been working with JGI, Frankfurt Zoological Society (FZS), Mpanda and Kigoma District Councils in Katavi and Kigoma regions respectively to conserve the Greater Mahale Ecosystem (GME), home to approximately 93% of Tanzania's 2800 endangered Chimpanzees. The GME which is a 4.8 forested landscape also provides refuge for other threatened species of mammals such as elephants, eland, hartebeest, duikers and buffaloes as well as other important primates such as the red colobus monkey, blue monkey, red tail monkey and bush babies. The vegetation of the GME including the forests serve not only as an important carbon sink but also help to reduce sediments entering the near shore areas of Lake Tanganyika which are critical fish breeding and nursery sites.

One of the most important outcomes that TNC and its partners have achieved recently is the creation and launch of an Inter-Districts Steering Committee known as **Greater–Katavi – Mahale –Gombe Ecosystem (GKMGE)** which will advance and sustain conservation of priority sites within the GKMGE which is a much larger and biodiversity richer ecosystem than the Greater Mahale Ecosystem alone. Currently the GKMGE Steering Committee which comprises of 20 Technical staff from Mpanda and Kigoma District Councils will carefully be broadened to include key representatives from the new administrative districts of Uvinza, Mlele and Nsimbo which have been subdivided from Kigoma Rural and Mpanda Districts.

[2] Land in Tanzania is classified as general land, village lands and reserve land. General land means all public land which is not reserved land (forest reserves, game parks, etc) or village land as per the Land Act of 1999.

During the launch of the GKMGE in August 2013, recommendations were made by participants to include key stakeholders from Tanzania National Park, Wildlife Division, Tanzania Forest Service, Tanzania Wildlife Research Institute, Lake Tanganyika Authority, district and regional secretariats and local NGOs working in the ecosystem so as to ensure effective coordination of all conservation and development activities within the Greater Katavi–Mahale–Gombe Ecosystem. The participants also reviewed the Terms of Reference for GKMGE Steering Committee and recommended that all members of the steering committee be trained in their roles and responsibilities as well as supported to understand key processes and procedures involved in the development of an Integrated Management of Plan for the entire GKMGE which includes the Greater Mahale Ecosystem. TNC is therefore requesting funds from the ABCG FY14 budget so as to build the capacity of newly launched GKMGE Steering Committees so that is capable of coordinating and implementing conservation within the GKMGE and achieve better bio-diversity and development results.

World Resources Institute

Over the past few years the ABCG members involved in *Task C: Land Tenure* (principally WRI, TNC, AWF and JGI) have conducted research on a range of land tenure issues and implemented field activities in a number of African countries. Recent attention has focused on new (voluntary and regulatory) land use and land management tools, such as easements, land trusts, overlapping land/natural resource rights, and government authorities to restrict land use (*e.g.*, police powers). Some of the research findings, recommendations, field experiences and lessons learned have been captured in research reports, working papers and other written documents. Some *Task C* members have also delivered the findings and recommendations though PowerPoint presentations at workshops and conferences in Africa and elsewhere.

In the final year of this USAID agreement, it is important for ABCG to capture all significant findings and lessons by all participating ABCG members from all *Task C* investments. Given ABCG's interest in reaching multiple target audiences (*e.g.*, government departments, corporations, civil society organization and other actors), it is important that these findings and lessons be made available in various forms (*e.g.*, written research reports, policy briefs, slide decks for PowerPoint presentations, and videos). This effort will require a systematic review of *Task C* work and identification of significant findings/recommendations for documentation.

Objectives and Activities

Africa Wildlife Foundation

To develop a business model for Community, Public and Private Partnerships for wildlife land that becomes a pilot for conservation and community benefits. AWF believes that this

will serve as a model for the national indigenization for the wildlife sector in Zimbabwe and other upcoming African democracies that will foster co-existence between local communities, government and the private sector for sustainable conservation gains.

Activities

AWF will:

1. Refine the model (clustering various properties in the conservancy so as to maximize management and linkage to adjacent communities);
2. Develop a proposal for presentation to the Minister of Tourism, Environment, Indigenization to approve.
3. Hold workshops with communities in the five administrative districts surrounding Save Valley Conservancy, i.e. Buhera, Zaka, Bikita, Chiredzi, and Chipinge.
4. Facilitate establishment for legal structures and agreements.
5. Replication of model in the Hwange and Gwayi areas in Mateleland North and South Provinces
6. Jointly partner with WRI and JGI to present findings & lessons learned and the overarching policy implications at the Annual World Bank Conference on Land and Poverty in March 2014, as well as at any other relevant forums.

Collaboration with other ABCG members will be through sharing lessons, jointly preparing and disseminating findings and lessons learned at land conferences and workshops.

The Jane Goodall Institiute

The JGI objectives include:

- Laying a foundation that ensures that the local authority forest reserves established are operationalized for the sustainable management of the reserves and areas of high biodiversity value identified and protected.
- Prioritizing areas of high biodiversity within the local authority forest reserves through the use of Marxan
- Clarity on the engagement of communities in the Participatory Forest Management process by the district that sets the stage for the establishment of partnerships that identify mutual benefits for both district and villages in the monitoring and protection of LAFR.

Funding under ABCG will fund training to support the development of a general management plan for the LAFR's. Through the use of Marxan in identifying specific areas within the LAFR that are of high biodiversity value, local district staff and partners will be introduced to the application of Marxan in prioritizing hotspots for conservation and understand how JGI and other partners are applying it. The information generated through

this process will be incorporated into the master land use plan being developed for the Greater Mahale Ecosystem.

Activities

- As an initial step in the development of a general management plan, we want to conduct training for all the district staff on the process of developing a general management plan, its importance as well as the follow-on steps of involving the communities through Participatory Forest Management. Capacity and knowledge on PFM and the development of a general management plan is varied within the district and we want to ensure that all the staff are at the same level of understanding. This training will be coordinated with TNC to coincide with the capacity building workshop being held for the Greater Katavi-Mahale-Gombe Ecosystem steering committee.
- Two new districts have been established – Nsimbo and Uvinza, leading to a total of 4 districts within our working area. Meetings will be held with representatives from the new district to bring them up to speed on the work that has been implemented in establishing the LAFR's and their importance.
- Run Marxan so as to identify and map key areas within the LAFR's with high biodiversity value and should be protected with no off take of resources permitted (activity coordinated with the Marxan Task).
- Work with WRI on documentation of all or most significant Task C findings implemented by JGI and other ABCG partners.

JGI will continue to collaborate with TNC in the implementation of these activities to ensure that our work is coordinated, support the district steering committee and that we build upon each other's work and share lessons for mutual benefit.

The Nature Conservancy

The objectives for this project are to:

- Support recruitment and orientation of additional GKMGE Steering committee members so as to ensure all key stakeholders are represented in the committee
- Build the capacity of GKMGE Steering Committee so that it understands its roles and responsibilities
- Train GKMGE Steering Committee in the process of development of an Integrated Management Plan for the Greater Katavi–Mahale–Gombe Ecosystem
- Support the GKMGE Steering Committee to develop a fundable long term strategic plan for the Ecosystem

Funding from ABCG will be used to undertake consultative visits and meetings with various stakeholders and current committee members so as to ensure that the GKMGE committee is representative of all key stakeholders. The fund will also be used to engage a highly qualified consultant(s) who will capacitate the committee members so that they understand their roles and responsibility as committee members as well as understanding

all the key processes and procedures involved in the development and implementation of an integrated Management Plan for the Greater Katavi-Mahale Gombe Ecosystem

Activities

With funds from ABCG, TNC will collaborate with JGI to undertake the following key activities:

- Support the current GKMGE Steering Committee members to identify and orient additional committee members from key stakeholders mentioned above.
- Engage a consultants to train GKMGE Steering Committee members in their roles and responsibilities as well as the processes and procedures of developing an integrated Management Plan for the GKMGE
- Support the Steering Committee to develop a fundable long term strategic plan for GKMGE
- Undertake outreach (including fact sheet development, presentations, meetings with local/regional/national government and partners) to inform the general public and government about the GKMGE.

World Resources Institute

Given the available budget for *Task C*, WRI's FY14 work will need to be limited. To date, most of the findings and recommendations from WRI's *Task C* research have been captured in written reports (e.g., research reports and policy briefs) and in slide decks for PowerPoint presentations. In FY14, WRI will seek to make some of our more significant findings and recommendations also available in other, more visual formats to reach and engage new audiences. Specifically, WRI will develop short videos of our key findings and recommendations.

Activities

In FY14, WRI will prepare two short videos on key *Task C* research findings and recommendations. The theme of each video has not been established, but as noted above, WRI will work with AWF as well as TNC and JGI to ensure the documentation of all or most significant *Task C* findings and experiences in various formats. Similarly, the nature of the videos has not been set, but each piece will likely be:

- Between 90 seconds and 3 minutes in length
- Animated, rather than film footage
- Narrated by an African voice

WRI has experience developing these types of videos, including videos on critical land tenure and property rights issues (see http://insights.wri.org/news/2013/04/without-land-what-would-farmer-do).

Outcomes

African Wildlife Foundation

Deliverables

1. Updated business model submitted to the Government of Zimbabwe—September 2014
2. Local community workshop reports—April 2014
3. Learning paper and Power Point presentation to the Annual WB Conference on Land & Poverty that will be included in a compendium that includes similar papers from WRI and JGI.

The Jane Goodall Institute

Deliverables

- Develop a map that identifies core areas within the LAFR's that are high in biodiversity and need to be conserved.
- Workplan for the development of the general management plan for two LAFRs

The Nature Conservancy

Deliverables

This project is expected to produce the following deliverables:

- A functional GKMGE Steering Committee which is representative of all key stakeholders
- GKMGE Steering Committee members fully aware of roles and responsibilities
- GKMGE Steering Committee members fully aware of the processes and procedures for developing an Integrated Management Plan
- A fundable long term strategic plan for the Greater Katavi-Mahale-Gombe Ecosystem

World Resources Institute

Deliverables

This work will deliver a few products:

- Two short animated videos (similar http://insights.wri.org/news/2013/04/without-land-what-would-farmer-do)
- The videos will be posted online on various sites, including WRI's website, ABCG's website

Task D: Support for Country 118/ 119 Operational Plans Biodiversity and Tropical Forestry Assessments

Task D will not include any continuing activities for FY2014 due to funding limitations in favor of other priority tasks, and the approaching BATS–ABCG current agreement close-out.

Level of Effort:

$0

Goal:

To assist USAID, USDA Forest Service and other partners to effectively implement 118/119 biodiversity and tropical forest assessments.

Task E: Integrating Approaches to Food Security and Biodiversity

Task E will not include any continuing activities for FY2014 as plans called for termination after two years.

1. D. Harness biodiversity and ecosystem services for improved agriculture (including increasing productivity and yields and improve food security; and adopting conservation agriculture or "ecoagriculture" approaches.

Level of Effort:

$0

Goal:

Develop an enhanced understanding of the conditions necessary for sustainable agriculture intensification to improve food security, and improved on-farm uptake of biodiversity-sensitive intensification practices.

Task F: Addressing Global Climate Change Through Adaptation and Actions in Woodlands, Grasslands and Other Ecosystems

Background:

Climate change, and its impacts on ecosystems and people, will likely be the biggest threat to biodiversity conservation in Africa in the future. The expected impacts of climate change include shifting rainfall patterns, rising temperatures, shifts in seasons, and sea level rise. The sectors that are most vulnerable to climate change in Africa include agriculture, water, and health; coastal areas and islands are expected to be heavily impacted. The Intergovernmental Panel on Climate Change projects an economic loss of approximately 10% due to climate change. Biodiversity impacts of climate change include shifts in species distribution and range, and the impacts of mitigation activities. Africa is particularly vulnerable to impacts of climate variability and change because of multiple stresses and low adaptive capacity, which threatens all aspects of the development agenda. Climate change is also closely tied to and has an impact on land use. Furthermore, in terms of biodiversity, there is increased vulnerability. There is also concern that existing protected area networks may not be adequate for biodiversity conservation in a time of changing climate. ABCG will use several approaches to addressing the impacts of climate change on biodiversity and human communities.

Task F.1: Climate Change Adaptation

Level of Effort:

USAID FY2014 Support: $122,925

Goal:

Mainstream human responses to into climate change into conservation climate adaptation planning.

Background

Climate change, and its impacts on ecosystems and people, will likely be the biggest threat to biodiversity conservation in Africa in the 21st century. We are already experiencing shifts in rainfall patterns, rising temperatures, droughts, seasonal shifts, and sea level rise. The impact of these physical changes on species and ecosystems is expected to be immense and may threaten the survival of up to 40% of species.

Human populations are also being forced to cope and adapt to these changing climatic conditions. Failing rains, increased flooding, shifting suitability for key subsistence crops, and alterations of ecosystem services are expected to have profound impacts on many African communities, with the poor and marginalized being particularly vulnerable. The planned responses and coping mechanisms human populations use to deal with climate change will also have a significant impact on biodiversity and the ecosystem services communities rely on.

The conservation community has done a decent job at exploring how the direct physical impacts of climate change (e.g. warmer temperatures, change in precipitation regime) will impact the areas we work, but has devoted significantly less attention in understanding how the human response will affect the future of biodiversity. Planning for successful, enduring conservation activities in an age of human-forced climate change requires full accounting for the processes that are reshaping the landscapes we work in. It requires an understanding of how climate change will alter the landscapes in which we work, both directly and indirectly.

The failure to fully account for the unplanned human response to climate change within conservation planning frameworks was identified by ABCG partners as a potential obstacle to the achievement of our collective conservation objectives. Over the past three years, ABCG has undertaken work designed to address this need by leveraging the collective experience of ABCG partners. In 2011 ABCG members published a systematic review of members' adaptation efforts in Africa[3]. The review identified a number of challenges to implementation of adaptation projects, including a poor knowledge around the potential impacts, lack of political will, and lack of an accepted methodology for monitoring and evaluation of adaptation projects. In 2012 ABCG members published A Review of Approaches to Monitoring and Evaluation for Ecosystem-Based Adaption Projects[4], a first step towards addressing one of the key challenges identified in the review. The 2011 review also highlighted the central role that improving human livelihoods plays in member organization adaption work. This finding led ABCG partners to organize a workshop in 2012 that brought together representatives of the development and conservation

[3] Seimon, A., J. Watson, R. Dave, J. Oglethorpe, E. Gray et al. (2011): A Review of Climate Change Adaptation Initiatives within the Africa Biodiversity Collaborative Group NGO Consortium, Wildlife Conservation Society, New York, and Africa Biodiversity Collaborative Group, Washington DC. 124 pp.

[4] Spearman, M., Dave, R., 2012. A Review of Monitoring and Evaluation Approaches for Ecosystem-Based Adaptation. Africa Biodiversity Collaborative Group, Washington D.C. 28 pp.

communities to discuss coordination of climate change adaptation activities. Both the conservation and development communities recognized the mutual interest in effectively addressing these issues and have stated a desire to work more closely together to achieve this. In FY13 the ABCG adaptation group sought to address a knowledge gap identified 2011 review by developing and piloting of a methodology to incorporate the human response to climate change into conservation vulnerability assessments. The work undertaken by the group over the last three years has made significant contribution to more complete accounting of the human response to climate change within conservation.

Objectives:

The proposed work plan for FY2014 and beyond aims to build off the past three years of project work and expand ABCG's efforts to mainstream consideration of the human response to climate change in conservation planning and action. Through the development of peer-reviewed research products designed to fill key gaps in the existing knowledge base, and targeted outreach to disseminate the findings of the group to the wider audience, we believe this work plan takes advantage of the work conducted over the past three years, and addresses the current gaps in the climate adaptation literature and the most serious issues that impede successful adaptation efforts on the ground.

We see two important activities that need to be conducted over the next year. To ensure the work conducted by the group over the last year reaches a broader audience, the group will document the work in a peer reviewed publication. The publication of the work will fill a void in the academic literature, ensure credibility of the work, and help shift the conversation in conservation today towards more complete accounting for the role the human response will play in shaping our conservation future.

Incorporation of the human response to climate change and its impact on wildlife and ecosystems into conservation adaptation is critical for meaningful, climate-smart conservation planning. As conservationists we are often asked to speculate on how humans might respond to shifting weather patterns, extreme events and longer-term change like sea-level rise, and assess the potential impacts these changes might have. Yet with ample evidence of change already happening, there has been little documentation of how humans are already responding in the absence of planned and well-funded adaptation projects. We propose to dedicate FY14 to document and study how human populations in Africa, particularly those who rely directly on natural resources for their livelihoods, are coping with disruptions like extreme events and adapting to change on their own with little or no external assistance from governments or NGOs. We believe that documenting past and current human responses to change and how this impacts the environment will support the integration of human responses into conservation planning by removing much of the guess work needed in this process.

Activities:

A. Turn the current white paper into peer-reviewed manuscript.

In FY13 the adaptation group of The Africa Biodiversity Collaborative Group developed a methodology to integrate human vulnerability into climate change vulnerability assessments. These efforts led to the development of a white paper that is near completion that details the application of this methodology in sub-Saharan Africa. Newly published ecoregional climate sensitivity data as well as a modifications to the recently incorporated species analysis demand that we update our methodology to include the best available to date.

In crafting a workplan for FY14 the group has collectively agreed that turning this white paper into a peer reviewed publication is a major priority for the group in FY14. The decision to target the peer-reviewed literature with this work was made in order to increase the impact of our work and reach a wider audience. Recent publications have shown that our work addresses a major vacuum in the current published literature on the vulnerability of conservation features to climate change, namely the lack of consideration given to how people will respond to climate change. It is important to note that publication in the peer review literature is required for the work to be cited by the global institutions and organizations that drive national and international climate change policy (eg. UNFCCC, IPBES, GEF, World Bank).

Target journals:

Conservation Biology, Global Change Biology, Ecology Letters, Conservation Letters, Biological Conservation, Nature Climate Change

Major tasks

Below are the major tasks required to bring the current version of the white paper to standards of a peer-reviewed publication. The tasks are listed below in chronological order with estimates of the time required to complete each task. The outline below assumes the manuscript will be accepted for publication by the first journal with mild revisions.

I. Planned updates/refinement of the analysis (5 weeks)

This task includes an update of the ecoregional analysis, finalizing the species analysis, addressing sensitivity of results, and the development of novel figures to communicate the results. The species analysis in the white paper uses the human response within the current range of each species. This will be updated to look at the human response within the future range, and range of overlap (intersection between current and future) for each of the 163 bird species. These are essential additions to the analysis prior to submission because the human impact layer used is forecasted impact in 2050. Comparison of the three may also provide new talking points for the discussion and provide insight into the temporal conservation requirements. The ecoregion analysis will be redone and results updated based on the most recent version of the projected direct impact at the ecoregion scale. We

also plan to refine some of the existing figures to bring them up to publication standards, and develop new figures to facilitate communication. Specific figures we are targeting or considering developing new include; 1) Mapping multivariate vulnerability for overlapping features (eg birds), 2) an aggregate figure that combines all three analysis (ecoregions, IBAs, species) into a single figure, and 3) Figures to illustrate case studies highlighted in the discussion. We will also address the lack of sensitivity analysis which was raised as a concern by group members in the first round of reviews and is likely to hinder publication. We have discussed a number of options for the sensitivity analysis but have not settled on a final approach yet and are open to additional suggestions. Options discussed thus far include 1) Using an alternative measure of human response, 2) Using vulnerability instead of Impact for the human response layer, 3) Classifying the human response before conservation feature analysis and looking at proportion of high response area within each of the targets. Please note that the current time allocated for this task would not allow for a major rework of other analysis in the form that happened between the first and second versions of the white paper.

II. Final write-up /wider review, including discussion section (6 weeks WCS time, 3 days each org)

The original white paper focuses primarily on the analysis with robust introduction, methods, and results sections. However the white paper's discussion section will require additional writing to meet traditional peer reviewed standards. The discussion section will be updated to include the broader implications of the methodology, and draw the connections between what the different risk profiles mean for individual conservation targets. Previous discussions have indicated that a couple of case studies drawn from conservation targets with different risk profiles maybe one way of highlighting the importance of understanding different sources of risk and their management implications. Comments from our working group on the first draft of white paper showed that many of the partners came at the results at every different angles and significant time is needed to have a fair process of making sure people's opinions are reflected in the revised paper. The primary discussion points in the original discussion need to be entirely reworked through a process that achieves agreement between the organizations. We plan to share the paper with the other ABCG partners for their thoughts and to see if they would like to join.

III. Editing and final review for submission (1 week WCS time, 1 day each org)

After completion of tasks I&II and feedback from co-authors will be integrated into the manuscript. The manuscript will be distributed to all co-authors for review and final comment. Co-author comments will then be incorporated into the final manuscript and the draft will be submitted for publication. This task also includes any additional literature review required to bring the paper up to journal standards and development of the supplementary materials required to support the submission.

IV. Address revisions and re-analysis (3 weeks WCS time, 1 day each org)

Upon acceptance of the manuscript we will most likely need to set aside time to address the comments and questions raised by journal's reviewers. More often than not, the concerns of

reviewers require additional analysis and we have included a modest amount of time to address these. WCS will reach out to the other co-authors to explain the reviewer concerns and the proposed solution(s) to address the concerns. After the concerns have been addressed the manuscript will be recirculated to all co-authors for final approval before resubmission.

V. Public outreach post publication (2 weeks WCS time)

Coinciding with publication, WCS will lead a media campaign to publicize our findings to to established audiences. This will include the development of an op-ed for a major newspaper (e.g. NY Times, Guardian, Huffington Post) and presentation of the work to at least one major conference next year (SCB North American conference, ESA conference, national climate adaptation conference) and presentation of the one in DC based forum. We plan to have the article submitted by January 2014 and conduct outreach activities during the summer of 2014.

VI. Caveats

If the review process of the paper is simple and requires less time than anticipated, WCS will shift its time allocation to another task agreed upon by the group.

B: Documenting unplanned human responses to changes in weather and climate

Climate change is upon us and people have already begun to respond. Early responses focused on reducing greenhouse gasses (climate change mitigation) and, more recently, reducing emissions from deforestation and forest degradation (REDD), in an effort to slow the rate of warming to allow more time for people and ecosystems to adapt. Even as these efforts continue, human populations are already experiencing climate-driven change and are responding in various ways described below.

Anticipatory Adaptation—Adaptation that takes place before impacts of climate change are observed. Also referred to as proactive adaptation.

Planned Adaptation—Adaptation that is the result of a deliberate policy decision, based on an awareness that conditions have changed or are about to change and that action is required to return to, maintain, or achieve a desired state.

Reactive Adaptation—Adaptation that takes place after impacts of climate change have been observed.

Autonomous Adaptation—Adaptation that does not constitute a conscious response to climatic stimuli but is triggered by ecological changes in natural systems and by market or welfare changes in human systems. Also referred to as spontaneous adaptation[5].

Of these four categories of adaptation, the first two – anticipatory and planned adaptation – are fairly well documented and with effort can easily be tracked, monitored and evaluated since they involve public policy decisions, deliberate planning processes and financial resources for implementation. Much more difficult to track and assess are reactive adaptation (which we will call "coping" for the purpose of this activity) and autonomous adaptation. Far removed from decision-making bodies and financial resources, rural communities in Africa and elsewhere are often left to their own devices to cope and adapt to change. What can we learn from these communities? Can successful responses serve as models for others? Are unplanned responses leading to maladaptation? How are responses, successful or otherwise, affecting wildlife and ecosystems? Are there positive benefits to nature as well as what many suspect are negative impacts? Because coping and autonomous responses go largely undocumented, we miss important opportunities to learn from the experiences of these communities and integrate learning into conservation planning efforts. The proposed activity for FY14 will begin to address this gap in our understanding.

Case studies developed under this activity will have the additional benefit of raising awareness in the conservation community of how climate change is already affecting wildlife and ecosystems and hopefully increase buy-in for increased adaptation efforts. Case studies can also be advocacy tools for greater financial resources for adaptation and climate-smart conservation.

Effort will be distributed between Africa and the United States and across the four adaptation partner organizations, with WWF taking the lead. We will select 3–5 sites across Africa that are known to have experienced rapid change in climate and weather conditions and/or that have experienced recent extreme events. Africa-based staff from the four partner organizations will help identify these sites and take responsibility for documenting current unplanned human responses to change with a particular emphasis on how responses are affecting local wildlife and ecosystems (we have reserved funds for a consultant to assist in this effort if necessary).

WWF will lead in developing a template and method for collecting and reporting this information. We anticipate that much of the data will come from direct interaction with local communities at the selected sites supplemented by field office knowledge, peer-reviewed publications, grey literature, and stories in the media. Representative data to be collected might include:

- Observed climate trends for each site over the past 30–50 years.
- Perceived climate trends by local communities at each site.

[5] IPCC Third Assessment Report - Climate Change 2001, Working Group II: Impacts, Adaptation and Vulnerability, Annex B: Glossary of Terms; http://grida.no/publications/other/ipcc_tar/?src=/climate/ipcc_tar/wg2/index.htm

- Documented and "unreported" extreme events occurring over the last 10-15 years for each site.
- Community perceptions of local changes in the environment, including wildlife and ecosystems, and to what they attribute this change.
- Community accounts of how they have coped with extreme events or other sudden and unexpected change and the effectiveness and consequences of these responses.
- Community accounts of how they are adapting on their own to longer-term trends without formal external assistance and the effectiveness and consequences of these responses.
- Community accounts on what they might have done differently with external assistance and resources
- Observed evidence of impacts (from communities or otherwise) of unplanned responses, on local wildlife and ecosystems.

From this effort, we will develop a brief case study for each site that can be used for awareness raising, education and advocacy. Given the limitations on time and resources available for this activity we do not envision a peer-reviewed academic paper as an output, but the analysis and results of the activity could call for additional time and effort devoted to this subject in the future.

In the United States, Dr. Nikhil Advani, senior program officer for climate change adaptation at WWF, will serve as the coordinator for this project, serving as liaison among US-based ABCG staff and their counterparts in Africa with an initial objective to work with Africa-based partners to identify study sites. He will also coordinate the effort to develop common templates and methods to be used in collecting data for the case studies. Nikhil will conduct a literature review as well as media and anecdotal accounts of unplanned adaptation in Africa and their impacts on wildlife and ecosystems. Finally, he will also draft initial case studies and an overview of findings for review by other ABCG partners.

Shaun Martin, senior director for climate change adaptation at WWF, will oversee the entire effort and take responsibility for reviewing case studies and other outputs and marketing and disseminating materials to various stakeholders and those who could benefit from our findings. All disseminated materials will be vetted by CI, TNC, WCS and WWF to ensure consistency with each organization's marketing and communications standards and guidelines. Target groups for dissemination might include:

- USAID missions in Africa and staff based in Washington, DC
- Relevant national and local government agencies in Africa
- ABCG staff in Africa and in headquarters countries as well as Africa-based conservation organizations
- Development NGOs
- Universities and training programs in Africa, the US and other countries that include climate change and its impacts on communities and the environment in their curricula
- Climate change and adaptation websites and online social networks

The WWF coordinator for the Africa Adaptation Initiative will conduct a workshop in Africa bringing together stakeholders to discuss findings and how to effectively use them in conservation planning efforts. While only $1,000 has been budgeted for this purpose, WWF's Russell E. Train Education for Nature program will provide up to $7,500 for this workshop.

US-based staff at CI, TNC and WCS will contribute by helping identify potential sites for case study development, identifying Africa-based staff or partners who can contribute to the effort, and assist in reviewing and disseminating outputs.

Major tasks

I. Identification of 3-5 target sites for investigation. (all orgs led by WWF, 2 days each)

As a group, US-based team members and their counterparts in Africa will develop a list of criteria for site selection. For example, sites that have been exposed to extreme events or longer-term shifts in climate, are priority areas for conservation, in-country presence of a participating organization, etc. Each organization will then use these criteria to select candidate sites in locations where they have projects or operations. The group will then review all candidate sites to select 3 to 5 for further study. We anticipate that each participating organization will be responsible for at least one site. Each organization will identify an Africa-based staff person to lead activities at the selected sites.

II. Development of research template and method (WWF 3 days, other orgs 1 day)

To ensure data collection from each site is uniform and consistent, in consultation with other participating organizations, WWF will lead in the development of a data collection template and method for use in the field. All organizations will review and approve the first prototype to be piloted in the field.

III. Piloting research template and method in Africa (WWF 1 week)

WWF will pilot the prototype method in the field, noting strengths and weaknesses and making recommendations for modification, if necessary, to the group. All organizations will review and approve the final research template and method.

IV. Analysis of peer-reviewed and grey literature on existing research and anecdotal evidence of unplanned responses to climate change (WWF 1 week)

Nikhil Advani at WWF will conduct a review of literature already available on unplanned responses to climate change, with a particular focus on Africa, and write a brief synthesis report (5-10 pages) of findings that can be used in later communications about the issue.

V. Data collection in the field (1 week for Africa-based staff at each organization)

Using the approved template and method, Africa-based staff from each organization will travel (if necessary) to their respective sites to speak with communities, leaders, wildlife managers, etc. to collect information on unplanned human responses to extreme events

and/or longer-term observed shifts in climate and impacts on ecosystems and wildlife. Data will include photos, quotes from community members, and potentially video footage for use in communications materials. If local staff are not available to conduct field visits, a consultant may be hired for this purpose.

VI. Development of case studies (2 weeks WWF, 1-2 days each for other organizations)

Using data gathered at each field site, WWF will draft write brief cases studies (3-5 pages) that can be used in communications, outreach and training workshops to raise awareness on the impacts of human responses to climate change on wildlife and ecosystems. Each organization will review and approve the case studies to ensure proper use of branding, tone, message, etc. In addition, WWF will develop a list of recommendations for conservation planners on incorporating human responses of climate change into their strategies and project design.

VII. Dissemination of case studies (WWF 3 days, other organizations 1 day)

Each organization will disseminate case studies and any accompanying materials through their normal communications channels (website, social media, press releases, member and donor communications, etc.). WWF will also disseminate materials to interested parties such as USAID, African governments, other Africa- and US-based NGOs, universities and training programs, etc.).

VIII. Africa dissemination workshop (WWF 1 week, other organizations 1 day)

WWF will coordinate a workshop with stakeholders in Africa to discuss findings and how to effectively use them in conservation planning efforts and use case studies in communications on climate change, impacts and adaptation.

Outcomes & Deliverables

Activity A

- Publication of a scientific paper in a peer reviewed journal
- Development of an op-ed for a major newspaper
- Presentation of the work to at least one major conference next year
- Presentation of the work at a DC based forum

Activity B

- Report of already documented unplanned human responses to climate in Africa and their effects on wildlife and ecosystems (January 2014)
- A tested method for use in collecting stories and information about human responses to climate and their effects on wildlife and ecosystems (March 2014)
- Collected data from each selected field site (June 2014)
- Final case studies and list of recommendations to conservation organizations written and disseminated (August 2014)

- Stakeholder workshop in Africa to discuss findings and how to use them in conservation planning and communications (September 2014)

Task F.2: REDD+

Due to funding availability in FY2013 as well as the large number of activities ongoing regarding REDD+ in the conservation world, activities on this issue have been suspended in favor of other tasks. ABCG continues to work on climate change in other respects, which may or may not include REDD+ as a factor.

Task F.3: Carbon Flux under Conditions of Climate Change: Woodlands, trade-offs and Climate change

Level of Effort:

USAID FY2014 Support: $191,230

Goal:

To provide case studies of how to integrate the objectives of climate change mitigation, climate change adaptation, and biodiversity for REDD+ project developers, government stakeholders and planners in African countries with substantial woodlands, and the funders of Climate change (adaptation and mitigation) in Africa such as USAID.

Background:

In a world of limited conservation resources, there is a realization that conservation managers and planners need to make trade-offs in decisions over what they want to conserve and where. Such decisions frequently involve multiple stakeholders, who often come to the table with dramatically different priorities, further complicating the decision making process. These decisions are also being made against a backdrop of all prior land-use decisions, which have often proved be short-sighted, leading to sub-optimal outcomes for all stakeholders. To address these often complex resource allocation problems a suite of decision support tools have been developed to assist managers. Marxan is one such tool. Marxan is a freely-available software that allows users to undertake spatially explicit trade-off analysis. Marxan has been used around the globe to identify critical areas for species and ecosystem conservation that minimize the impact of conservation decisions on other stakeholders. Marxan can also be used to assess trade-offs between competing objectives, or to identify where offsets for development impacts (e.g. forestry, farming etc) would be best cited.

Each ABCG partner identified a landscape where they were currently dealing with complex trade-offs to be a focal point for the projects. Nominated landscapes along with the ABCG partner lead were Murchison Falls/Semiliki landscape, Uganda (WCS); Kilimanjaro landscape, Kenya (AWF); and Masito-Ugalla Ecosystem, Tanzania (JGI). Landscape engagement was planned around a two workshop format. The initial workshop was designed to introduce conservation managers, planners, members of the development community, and government representatives to these relatively new tools and how they can be used to make better decisions for all concerned. Attendees reviewed input data, provided insight into the compatibility between different uses and suggested objectives for conservation and socio-economic targets. The initial workshop for the Murchison

Falls/Semiliki landscape was held in FY12, and the initial workshops for the Kilimanjaro landscape and Masito-Ugalla landscape were held in FY13.

Building on the first workshop and the expert advice elicited the analysis for each landscape was then to be refined into a set of scenarios for decision making. These scenarios represent different future configurations landscape and differ in the extent to which conservation, carbon under REDD+, economic development and robustness to climate change represented in the landscape. The scenarios and analysis efficiently allocate conservation resources across the landscape and identify trade-offs between conservation and other objectives where they occur. The findings and analysis are presented to stakeholders in each landscape at a second workshop designed to communicate results and solicit recommendations for maximizing the impact of the work either through further refinement of the analysis or reaching a broader audience. The second workshop in the Murchison Falls/Semiliki landscape was held in FY13 and the second workshop for the Kilimanjaro landscape and Masito-Ugalla landscapes are planned for FY14.

Objectives and Activities:

The proposed work plan for FY14 aims to build off the past two years of project work and complete the tasks outlined in the original workplan. The key objectives of the FY14 workplan include the second workshop in both the AWF and JGI landscape to present refined findings, and the documenting the methods developed as part of the project so that they can be shared with a wider audience.

Activities Summary:

A. Masito-Ugalla Landscape, Tanzania

Lead: JGI
Supporting: WCS

Preliminary workshop for the Masito-Ugalla landscape was completed in held in May 2013. The analysis and Marxan database is currently being refined to reflect input gathered from stakeholders in the landscape. The second workshop to present the refined set of scenarios exploring trade-offs in the landscape is targeted for January 2014.

B. Kilimanjaro landscape, Kenya

Lead: AWF
Supporting: WCS

Preliminary workshop for the Imbirkani group ranch landscape will be held in September 2013. The analysis and Marxan database will then be refined to reflect input gathered from stakeholders in the landscape. The second workshop to present

the refined set of scenarios exploring trade-offs in the landscape is targeted for March 2014.

In Oct/November 2013, WCS will travel to DC for a three day preparatory meeting with JGI and AWF aimed at supporting both of their respective 2nd workshops (Activities A&B).

C. Communication and outreach

Lead: WCS
Supporting: AWF, JGI

One of the primary objectives of this project is the sharing of lessons learnt and novel methods developed as part of the project so that they can serve as examples for other parties engaged in similar analysis. To do this we will formally document the methods used in the analysis and synthesize lessons learnt in applying the methodology across three landscapes with stakeholders. To do this we will hold a writing workshop in NY or DC that brings leads together to think through key messages from the work. We will also look for opportunities to share the results with audiences both in the US and within the landscapes in which the analysis and workshops were performed.

Outcomes and Deliverables:

- 2nd Workshop to Kilimanjaro landscape, Kenya landscape to present findings and recommendations
- 2nd Workshop to Masito-Ugalla Landscape, Tanzania to present findings and recommendations
- Targeted in-landscape outreach to present findings of the analysis for each of three sites
- Draft scientific paper on the application of the methodology in three landscapes

Task F.4: Clean Energy and eco-charcoal

Level of Effort:

USAID FY2014 Support: $136,145

1. D. Review the knowledge base on clean energy programs and their use in Africa, the links to conservation and develop recommendations to inform policy on suite of necessary drivers for adoption of appropriate technologies to provide meaningful conservation leverage.

Goal:

Build knowledge, capacity and accessibility of clean energy technology to enhance adoption of appropriate technologies and practices at a scale that provides meaningful natural resource and biodiversity conservation co-benefits.

Background

Renewable clean energy is a priority for sustainable development and there is a forecast 40% increase in energy consumption over the next two decades, mostly in developing countries, where nearly 2 billion people lack access to electricity, and 3 billion people rely on traditional biomass fuels for cooking, heating, and other basic household needs. The use of these traditional energy sources results in forest degradation and impact negatively on climate change, through reduced carbon sequestration and increased GHG emissions. Additionally, they present a public health challenge from indoor air pollution[6]. The negative impacts stemming from this situation highlight the importance of investing in sustainable and accessible green technologies.

In FY13, both African Wildlife Foundation (AWF) and the Jane Goodall Institute (JGI) facilitated detailed field assessments to better understand the energy options and extent of adoption of fuel efficient technologies which we see as critical to REDD+ programs that ABCG members African Wildlife Foundation (AWF) and the Jane Goodall Institute (JGI) are piloting. Products from FY13 work include a reference assessment report and a step-by-step field tool kit for reference by extension staff when promoting the use of clean cookstoves and solar lighting technologies.

[6] (http://cleancookstoves.org/announcements/un-secretary-general-highlights-cookstoves-energy-access)

African Wildlife Foundation

Objectives and Activities

- Raise awareness among local communities in Olbili, Oltiasika, & Lemasusu villages of the Mbirikani Group Ranch on the multiple benefits of using improved cook stoves and solar lighting technology.
- Build capacity among the selected Mbirikani Group Ranch communities in Kilimanjaro landscape of Kenya to fabricate and install improved cookstoves developed and tested by the Maasai Stove and Solar Project (MSSP).
- Create partnerships among organizations and institutions, e.g. the Global Alliance for Clean Cookstoves, Woodlands Trust 2000, etc., that work on energy technologies in this area to strengthen capacity for scaling up.
- Reach out to the National Environmental Management Authority and Climate Change desk in Kenya to sensitize policy on clean energy.

Activities

- Learn from existing projects and businesses—document lessons from Woodlands Trust 2000 project that are specific to the Mbirikani context, to inform initiatives with MSSP and other improved energy providers.
- Work with MSSP to develop initiative to extend reach into Mbirikani Group Ranch.
- Identify and train individuals to fabricate and install improved cookstoves in Mbirikani
- Train communities on promotion and awareness of improved cookstoves, and their positive impact on health from reduced indoor air pollution and the environment from reduced deforestation and forest degradation.
- Identify and partner with local organizations with strong community links and those that are developing similar projects (including work being done by AWF in the Chulyu Hills and surrounding areas)
- Develop and produce fact sheets, white paper and presentations at conferences and meetings with local/regional/national government and partners

Outcomes and Deliverables

- Strategy document on MSSP introduction into Mbirikani Group Ranch
- Five individuals trained on MSSP products, fabrication and installation
- Three awareness meetings held in local communities
- Technical report on the piloting experience with local households

The Jane Goodall Institute

Objectives and Activities

In FY14, using ABCG funds, JGI will target ten villages under this task, as well as identify five institutions in Kigoma, Uvinza, Nsimbo and Mpanda districts that are high users of

charcoal and firewood to facilitate introduction of energy saving cooking alternative. Objectives of this work include;

- Increase awareness within Kazuramimba, Kalinzi, Illagala and other target villages on the multiple benefits of using improved cook stoves and other clean energy technologies
- Increase availability and utilization of briquettes as an alternative source of household fuel
- Improve coordination and partnership with other organizations that promote clean energy for household use and food processing such as TaTEDO (Tanzania Traditional Energy Development and Environment Organization), Arti-Energy, and Global Village Energy Partnership (GVEP).
- Ensure that the highest consumers of charcoal and firewood are identified, and alternatives identified for their adoption

Activities

- Raise awareness within Kazuramimba, Kalinzi, Illagala and other target villages on the multiple benefits of using improved cook stoves and other clean energy technologies.
- Promote briquettes production and use as an alternative source of fuel and identify on-farm residues that can be used by farmers for making briquettes
- Build on discussions initiated in FY13 with TaTEDO on the promotion of improved charcoal stoves in households in Kigoma town as well as owners of small businesses
- Identify groups interested in solar drying and heating technologies in Kigoma – e.g., small business owners.
- Identify institutions within Kigoma that are the highest consumers of charcoal/firewood and identify alternatives for them.
- Improve coordination and create partnerships among organizations and institutions e.g., Arti-Energy, TaTEDO and Global Village Energy Partnership (GVEP), etc., that work on energy technologies in this area to strengthen capacity for scaling up. These partnerships can lead to the establishment of model villages and institutions for clean energy demonstrations

Outcomes and Deliverables

- List of villages targeted and the clean energy intervention implemented in that village. Villages may include - Kazuramimba, Kalinzi,and Illagala.
- Ten awareness meetings held within Kazuramimba, Kalinzi, Illagal and other target villages.
- Plan for integrating improved technologies into institutions developed.
- Guides by Arti and TaTEDO on the processes they have used and final recommendations on identification and piloting of clean energy techniques
- Documented evidence of savings that a household will make by using fuel efficient stoves.

Task F.5: Grazing Management and Carbon Sequestration

Level of Effort:

Level of effort: USAID $64,336

Goal:

To better understand how holistically planned grazing can be rolled out across multiple community conservancies, and to determine the extent of rangeland improvement and soil carbon sequestration.

Background

The world's human population is headed to unprecedented levels, with estimates of 10 billion people by 2100 frequently cited and supported by demographers (e.g., UN 2011). The provision of services and natural resources (e.g., food, water, energy, raw materials) to sustain this global population has elevated both public and private interests in investing in Africa due to its rich, relatively untapped natural resource base. In addition, Sub-Saharan Africa is the only region where fertility has not declined substantially enough for population stabilization to occur in the near term (Allendorf and Allendorf 2012). Therefore, conservation in Africa will continue to face the vexing challenge of simultaneously increasing development and population growth pressures.

Development agencies, such as the World Bank, are now frequently focused on achieving a "Triple Win" in land use projects to simultaneously generate higher yields, greater climate resilience, and increased greenhouse gas capture (http://www.worldbank.org/en/news/video/2011/09/01/climate-smart-agriculture-a-triple-win). Grasslands, savannas, and other rangelands hold enormous potential to produce "triple wins," as they store an estimated 1.7-2.4 Gt of carbon in soil (Conant et al. 2001, Lal et al. 2007, White et al. 2000), occupy 41% of the earth's land area, and sustain some of the world's poorest people through pastoralism and livestock production (FAO 2009). Because pastoralists in many areas have become more sedentary in recent decades, livestock overgrazing or excessive fires combined with drought have led to degradation of soils and productive capacity.

More intensive grazing and failing pastoralist systems in Africa's rangelands, are now exacerbating rangeland degradation – especially in areas that are particularly vulnerable to climate change (Reid *et al.*, 2004). In northern Kenya, rangeland degradation is the leading threat to pastoral people and wildlife living in and depending on these semi-arid grasslands for their survival. Recovery of degraded rangelands may provide an additional "win" by

securing the culture of pastoralism that in turn *provides critical habitat for Africa's iconic wildlife* that rely on habitats outside existing protected areas. Consequently, significant recovery of these degraded lands may improve livelihoods, sequester significant amounts of carbon, and conserve biodiversity if new management practices that increase mobility and flexibility in land use are willingly adopted by pastoralists.

Objectives

Recent studies (Lipper et al. 2009, McSherry & Ritchie 2013) suggest a strong potential of African rangelands to help mitigate climate change by accumulating soil carbon. In pastoral landscapes, reducing grazing and fire-induced degradation are the two actions with the greatest potential for soil carbon sequestration, and local-level institutions have the potential to adopt these actions and benefit from potential carbon payment programs.

The question remains, can we convert this vast rangeland potential into actual gain for people and nature?

A key problem is that field-based and satellite-based estimates of carbon stocks and data on management impacts on human well-being are limited and poorly linked. Carbon measurements need to be made at multiple scales and combined with modeling of soil carbon dynamics in response to altered management, and recommendations used to create incentives and benefits to people (FAO 2010).

The past two years of effort on this ABCG pilot project in Northern Kenya have been focused on the following goal:

To better understand how holistically planned grazing can be rolled out across multiple community conservancies, and to determine the extent of rangeland improvement and soil carbon sequestration.

The primary objective of this next year to expand the initial two year ABCG grant and focus on turning this Northern Kenya pilot study *into a fully-fledged soil carbon project*. To do that, three key objectives must be accomplished:

1. Complete a soil carbon and rangeland health baselines for all participating conservancies.

A planned grazing program was rolled out across the community conservancies in the Northern Rangelands Trust (NRT) over the first two years of the ABCG grant. Based on this experience and initial success, NRT was successful in leveraging the ABCG investment in establishing a new approach to planned grazing and secure a large grant from DANIDA to expand this program to 11 Conservancies over the next two years. Beyond this, NRT has committed to continuing this program until all 14 Conservancies are participating by the end of 2016 (Figure 1).

As the planned grazing program grows, there is a need to gather data from this larger footprint of participating conservancies. In addition, some of the initial soil and vegetation

sampling protocols need to be improved. Finally, a completely separate suite of samples and analysis were also launched as part of a new partnership with the World Agroforestry Institute (ICRAF) based in Nairobi, Kenya. When the results of reassessing all this new information is complete, it will establish an appropriate soil carbon baseline for this entire region. This is a top priority to complete in the coming year if this investment will ultimately result in the launching of an official soil carbon project – the stated intent of both NRT and The Nature Conservancy (TNC).

2. Establish a biodiversity baseline sensitive to management interventions.

A weakness of the first phase of this pilot study was the weak link to biodiversity – the stated mission of ABCG. We believe it is critical to establish a clear link to the biodiversity impacts of this project. While it is an admirable goal to sequester more global carbon in the soils of Northern Kenya, it is necessary to illustrate the benefits to biodiversity that these habitat restoration efforts actually produce. Consequently, it is essential to establish an appropriate biodiversity baseline assessment that will be sensitive to changes in grazing management and rangeland health improvements. This grant will provide important seed funds to be matched by TNC and NRT to make this possible.

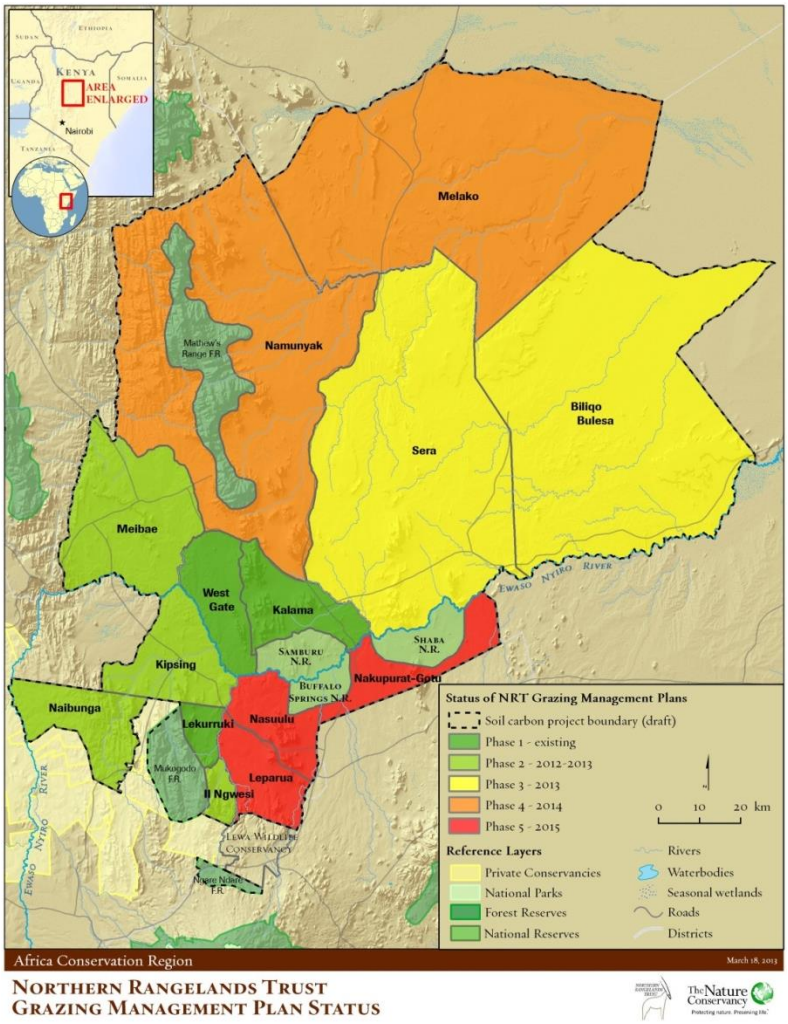

Figure 1. NRT Grazing Management Plan.

3. Develop remote sensing tools to track management actions and impacts.

The vast extent of this project area combined with the dynamic nature of the management intervention – i.e., altered grazing management of livestock across conservancies, wet and dry seasons, and ultimately climatic events across years - demands that more effective monitoring is possible via the improvement of remote sensing imagery linked directly to grazing intensity. The vast majority of scientific literature continues to hammer home this message that the link between new tools and models and field-based information is essential for this idea to have impact in Africa. Fortunately, recent and unpublished Ph.D. research from Syracuse University that was conducted in parallel with this ABCG soil carbon project has revealed an important breakthrough. By incorporating existing satellite thermal band information into existing indices of vegetation greenness (Normalized Difference Vegetation Index (NDVI)) and structure (enhanced vegetation index (EVI)), it appears possible to detect changes in grazing intensity on grasslands within an acceptable level of uncertainty on a nearly-realtime basis.

However, this potential needs to be validated by comparing satellite data with actual changes in the use of the land by livestock. For the first time this will be possible due to the grazing plans put into place by the first phase of the ABCG grant. In this next year, we propose comparing modeled results of a modified EVI index that incorporates thermal band information (most appropriate for Northern Kenya) with actual changes in grazing management—with the explicit objective of developing a relatively low cost, satellite-based, grazing management tracking tool useful not only for this project, but ultimately for other grazing management projects in Africa and other remote rangelands around the world.

Given that TNC and others (i.e., Fauna and Flora International) have invested in establishing a new methodology specifically focused on grasslands in Africa that is now entering the final stage of the double review process, it is our expectation that by the end of this calendar year there will be an official methodology this pilot project will be able to use to officially launch a soil carbon project in the next year. Investing in completing the necessary soil carbon and biodiversity baseline assessments, and developing a remotely sensed tracking tool tailored to the management action – altered grazing management – would complete a solid investment by ABCG to take this idea of a rangeland soil carbon project and turn it into a reality.

The expansion of this pilot study to other areas in Africa is the focus of a recent $200,000 proposal to bring together multiple ABCG partners—primarily TNC and WCS, but also including WWF, USAID, and others—into a forum to better build a framework to advance soil carbon projects for Africa. The anticipated results and benefits from this proposal include:

- Analysis and synthesis of existing soil carbon project data and its relationship to other global assessment systems (i.e., Land Degradation Surveillance Framework and and Land-Potential Knowledge System) for evaluating current and future soil carbon stocks under different management scenarios.
- Recommended changes to the existing grazing management plan, including small stock (sheep and goats), for the Northern Kenya region.
- Recommendations to increase the rate and degree of adoption of the new altered grazing management plans by local pastoralists.
- A roadmap for expansion across Africa, including incorporating new ecological, sociocultural, and economic factors.
- Guidance on how to improve access to carbon markets.

This proposal is another example of potential leverage from this pilot study to address the goals and vision and mission of ABCG.

Activities

1. Complete Soil Carbon and Rangeland Health Baselines - NRT, Syracuse

A successful Northern Kenya Carbon Project depends critically on being able to model changes in soil carbon as a consequence of altered grazing management. The model of choice or the project is the SNAP (Serengeti National Park) model (Ritchie, in review) of changes in soil carbon as a function of fire and grazing. Sampling during 2012 showed that the model has the potential to be accurate enough to meet the standards of the Verified Carbon Standard (VCS), the leading accreditor of land use carbon projects. However, several factors have emerged during the review process for the new VCS methodology (that relies on this SNAP model) that will require retaking some of the previous measurements gathered during the first phase of the USAID ABCG grant. In particular, soil bulk density was not measured by the method now required by the VCS, and further sampling is now necessary to obtain new bulk density measurements and corrected SOC measurements. Previous data also suggest that the model needs to be modified to (1) account for soil erosion and carbon losses at low vegetation cover in highly degraded sites and (2) to account for the carbon dynamics in abandoned bomas (temporary corrals that hold and protect livestock overnight). New sites to test such modifications were sampled in November-December 2012 and results are still pending.

However, it is also necessary to extend the sampling of soils and vegetation into three new Conservancies and into the newly included area of the Melako Conservancy. This would involve conducting the modified rangeland health assessment that includes historic and current grazing intensity, as well as the modified soil bulk density measurements. This would be conducted by NRT staff in conjunction with Syracuse University. Maps of the new locations and sampling design are available on request but FY14 activities are envisioned as follows:

Identify ~40 new sites in participating Conservancies currently lacking soil or vegetation data (covering both sandy loam and black cotton (if available) soils in the three new conservancies (Leparua, Nasuulu, and Nakupurat-Goto) and previously unsampled areas of Melako conservancy .(TNC -Dan Kelly; Syracuse-Mark Ritchie)
Review and revise list of ~40 new sites and integrate into VegCoMMS sampling plan in Leparua, Nasuulu, Nakupurat-Goto, and Melako conservancies. (NRT-Jeff Worden)
Sample all old and new sites, and deliver soil and vegetation samples to ICRAF (NRT-Jeff Worden).

2. Establish biodiversity health baseline assessments sensitive to management interventions.

In the next year, we propose to develop a system of biodiversity "camps" to sample the savanna/ grassland habitats via 14 strategically located areas across the entire NRT project area. These biodiversity camps will be located to include within 5 km a suite of sampling sites that include glades (old bomas) and non-boma sites in Core (little or no grazing), Buffer (planned, limited use livestock grazing), and Settlement (unlimited year-round grazing) land use areas within the Conservancies that have implemented these different land uses in the past 5-15 years. Glades have been shown to be important local hotspots for species diversity (Gebeyehu and Samways 2003, Morris et al. 2009, Young et al. 1995). Sites associated with each camp should also include black cotton soils, though it is less likely that these soils would contain glades, as herders generally avoid using black soils in the region except during the dry season. Fourteen camps should be sufficient to detect change in biodiversity, given the relative uniformity of soils, annual rainfall amounts, vegetation, and land use across savanna/grasslands in the project zone.

Each camp will be associated with a constellation of 7 or more sampling sites (Fig. 2) and allow species richness and other diversity estimates to be compared among land use (grazing, glade vs non-glade) and soils.

Two types of sampling will occur at each site: **Integrated mini-transects** for measuring plant, grasshopper, and dung beetle diversity and **belt transects** for measuring bird and reptile diversity. Integrated min-transects follow established sweep-sampling methods for grasshoppers, pitfall trap methods for sampling dung beetles, and vegetation

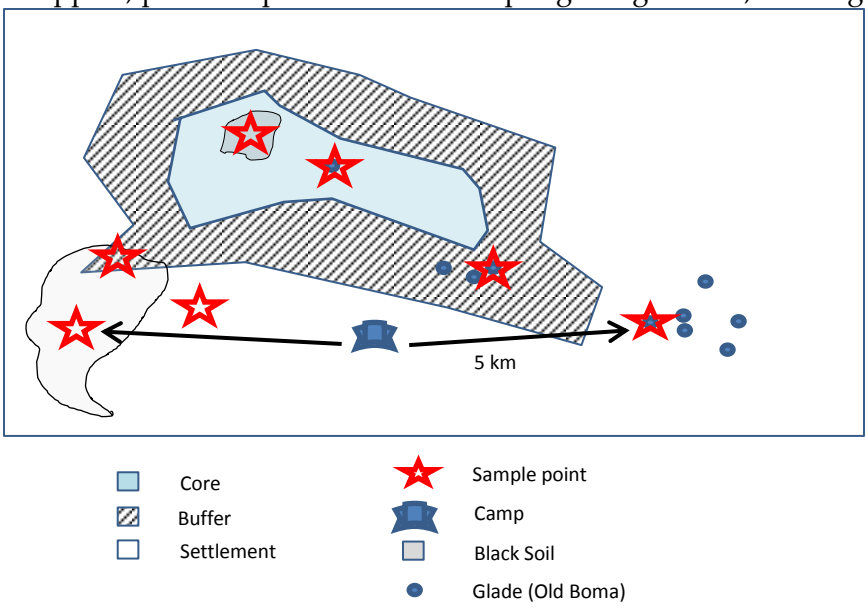

Figure 2. Schematic of a biodiversity sampling camp showing sampling sites (red stars) located on different types of sites in Core, Buffer, and Settlement land uses on both sandy loam and black cotton (gray outlined areas) soils, centered on both glades and non-boma sites in a constellation within 5 km of a central camp (blue tent).

methods, with a twist, already used in current community-based rangeland health monitoring system referred to as "VegCoMMs" within NRT. Belt transects follow established methods for sampling birds and reptiles in biodiversity surveys.

This integrated sampling design allows larger fauna (birds, reptiles) to be sampled at an appropriate scale while still linking any such data to a measurement of vegetation and plant diversity. Where possible, these sampling sites should be placed at current permanent vegetation sampling points established for VegCoMMs. Clustering multiple sampling sites around a common camp greatly reduces costs because nighttime sampling of dung beetles in pitfall traps can be done multiple times, which is important, at the same time as multiple morning sampling of birds and reptiles and afternoon sampling of grasshoppers and plants. It is expected that each camp can thus yield biodiversity data across multiple days from all 7 sites in 3-4 days, depending on the proximity of individual sites, and available staff and crews.

Activities in the next year will include:

- Finalizing the design of the biodiversity camps (NRT-Jeff Worden; Syracuse – Mark Ritchie)
- Coordination of experts to train local NRT staff in sampling techniques across multiple taxa (NRT-Jeff Worden)
- Organization of survey logistics (NRT-Jeff Worden)

3. Develop remote sensing tools to track management actions and impacts - Syracuse

Recent remote sensing analysis (McSherry, unpublished data) has shown that modifying the existing EVI model of greenness of EVI to incorporate a thermal index explains the most variance (about 43%) in observed historical grazing intensity. It performs about 2% better than NDVI-thermal and about 8% better than either EVI or NDVI alone (M. Ritchie, pers. comm).The thermal information significantly improves the predictability of EVI by about 15%. Either NDVI or EVI plus thermal explains nearly 60% of the variance in historical grazing intensity in the buffer zone where grazing intensity is most variable. similar to previous results from the Serengeti in Tanzania. **This level of accuracy is potentially robust enough to track changes in grazing intensity once the ungrazed condition is calibrated to the satellite image.** Core areas provide a great potential source of data for calibrating potential values for ungrazed conditions.

In the next fiscal year, activities to calibrate this model for use in this project area would include:

- Monitor grazing impacts on Westgate and Kalama and compare these to the grazing plans for the two Conservancies (Syracuse – Mark Ritchie; TNC – Dan Kelley)
- Compare grazing from satellite-based and ground measured grazing impacts on other Conservancies with less well-implemented grazing plans, such as in Meibae (Syracuse – Mark Ritchie; TNC – Dan Kelley)
- Investigate the potential to extend an existing model (Wang and Bras 2011) to improve estimates of the impacts of grazing via combining thermal with vegetation indices (Syracuse – Ritchie).

Deliverables

By September 30, 2014:

- A comprehensive soil carbon baseline assessment for the entire NRT project area.
- A rangeland health baseline assessment for the entire NRT project area.
- A baseline biodiversity health assessment for the entire NRT project area.
- A validated remote sensing model to detect change in levels of grazing intensity across the entire NRT project area.
- Final report

Task G: Bridging the Gap between Global Health and Biodiversity

I.F. Enhance the relationship between healthy ecosystems and healthy communities including mitigating risk and impact of emerging diseases especially HIV/AIDS (e.g. reducing risk of disease transfer among wildlife, people and livestock; and mitigating the impacts of emerging diseases on wildlife, the environment, and people)

Background:

The interconnections between global health and biodiversity are complex and in need of greater attention. ABCG is currently focused on two particular aspects of the linkages between health and biodiversity—HIV/AIDS and conservation and Water, Sanitation and Health (WASH).

Task G.1: HIV/AIDS and Conservation

Level of Effort:

USAID FY2014 funds: $22,562

Background

BATS has supported the development of ABCG's HIV/AIDS and Environment Manual, a resource for conservation practitioners who wish to support their staff and surrounding communities in the face of the enormous challenges presented by the HIV/AIDS epidemic. The first several years of ABCG's BATS-funded work on this issue were classified as one of our "Emerging Issues." Given the increasing importance of equipping conservation practitioners and local communities with support, education and programs to address HIV/AIDS, as well as other threats to global public health, ABCG wishes to elevate these activities to a full task. ABCG members, conservation partners and local communities participate in training workshops on the development of workplace policies and programs on HIV/AIDS and conservation to assure that they have sufficient resources to respond to local and regional threats posed by HIV/AIDS.

Activities

1. **Identify and hire a consultant to lead the development of the training workshops materials and agenda**
   Daulos Mauambeta, former Executive Director of the Wildlife and Environment Society of Malawi (WESM) has championed this issue for many years, and has worked with ABCG on HIV/AIDS and conservation research and outreach extensively. He guided WESM to create workplace policies and programs to improve the quality of life of staff, their families and local communities with which they worked. Daulos will work with ABCG to develop training materials based on the ABCG HIV/AIDS and Conservation Manual and will coordinate the workshops in conjunction with ABCG members and partners.
2. **ABCG members and conservation partners organize training workshops that include conservation staff, local and regional conservation partners and local communities**

   ABCG will work with members and local partners to conduct training workshops that provide critical up-to-date information and resources on preventing infection from HIV, provide treatment and resources for AIDS-affected staff and partners and developing workplace policies and programs for staff, partners and local communities.

Deliverables

1. Training materials developed in consultation with HIV/AIDS and environment experts that are appropriate for conservation staff and partners
2. Training workshops are held for conservation staff and partners in at least one sub-Saharan country

Task G.2: Linking WASH and Healthy Ecosystems

Level of Effort:

USAID FY2014 funds: $82,495

Goal:

To improve the ability of organizations working in sub-Saharan Africa on Water, Sanitation and Hygiene (WASH) and freshwater ecosystem conservation to plan, monitor, implement and evaluate the outcomes of integrated projects intended to achieve simultaneous health and environment goals.

Background and Objectives

Water, poverty and environment are intrinsically connected. Areas of high endemism and biodiversity are usually relatively remote and as a result human communities living in close proximity to these areas tend to be impoverished with little to no access to improved water sources and sanitation facilities. Conversely, in the downstream reaches of rivers, acute water shortages are becoming the norm in some areas as the myriad stakeholders take up water to meet their disparate needs e.g. heavy industry, irrigation for agriculture, fisheries, tourism, and municipal water and electricity utilities. The impacts on human health linked to the lack of access to improved water and sanitation facilities range from water-borne diarrheal diseases such as typhoid, giardia and cholera to water-washed diseases such as roundworm, trachoma and scabies.

Water, sanitation and hygiene projects are a fundamental cornerstone of human development. Access to water (in relative proximity) translates into increased economic productivity and healthier communities. Well-planned sanitation infrastructure minimizes the risk of acquiring the aforementioned water-borne diseases resulting in a healthier and more vibrant community, as well as healthier ecosystems.

The objective of this project is for members of the Africa Biodiversity Collaborative Group (ABCG) consortium, with support from the U.S. Agency for International Development (USAID), to lead a process to develop indicators that assess the outcomes of integrated WASH and freshwater conservation projects and serve as a meaningful step towards developing monitoring and evaluation approaches for those conservation projects.

Needs and Opportunities

The ABCG-funded June 2012 report entitled, "***Linking Biodiversity Conservation and Water, Sanitation, and Hygiene: Experiences from sub-Saharan Africa***" found that there are

numerous organizations and projects in sub-Saharan Africa that are integrating WASH and biodiversity conservation on an ad-hoc basis. The report called for more comprehensive guidelines on how to actually integrate the two disciplines under different scenarios, ecoregions and climates. Building on this report, in FY13 ABCG members collaborated with a number of development organizations specializing in WASH, to develop guidelines for the design and implementation and monitoring of integrated projects to improve freshwater conservation and human well-being.

During the development of the "***ABCG Freshwater Conservation and WASH Integration Guidelines,***" - monitoring and evaluation, indicators, and measuring results were themes that came up repeatedly as areas that were lacking research and guidance. Although each sector has existing frameworks for evaluating, for example, the number of people impacted by a WASH project or hectares restored within a watershed, there are no existing resources that evaluate the benefits of an integrated project. USAID's Global Water Coordinator, Christian Holmes, cited that this gap is one of the major challenges the agency has around the promotion and funding of these types of joint projects. Although it will take time to create a rigorous monitoring and evaluation framework for integrated projects, there is an existing evidence base that can be drawn upon to make a meaningful contribution to this process by developing indicators, based on experiences and lessons learned.

Activities Summary

To achieve this goal of improving the evaluation of integrated WASH and conservation project outcomes, CI and TNC will take the lead in convening a three-day workshop in Nairobi, Kenya for ABCG member organizations, WASH practitioners and organizations, and other conservation NGOs working in Sub-Saharan Africa to come together and produce a set of indicators for integrated WASH and freshwater conservation projects. The target audience for the workshop will be integrated project implementers and donors, such as USAID mission staff. Ideally, the workshop participants will include individuals representing some of the projects reviewed and/or profiled in the ABCG report "***Linking Biodiversity Conservation and Water, Sanitation, and Hygiene: Experiences from sub-Saharan Africa.***"

CI, in close collaboration with AWF, TNC, WWF, WCS and other ABCG partners, will reach out to current collaborators involved in the InterAction WASH working group, such as Catholic Relief Services (CRS), CARE, WASH Advocates, Millennium Water Alliance and Population Services International, for their input on developing the workshop agenda as well as engaging their Africa-based staff. We will also reach out to donors such as USAID and the World Bank in East Africa, and private sector actors in order to leverage existing efforts in integrated indicator development. These guidelines will help increase the ability of NGOs in Africa to evaluate the effectiveness of integrated WASH and freshwater conservation projects.

More broadly, the results of this effort on integrated indicators can be used to feed into the global and sub-Saharan Africa initiatives on the post-2015 Sustainable Development Goals. Once the indicators are developed, ABCG members and their development partners may test out the indicators to ensure their applicability and effectiveness in measuring successful, sustainable WASH and freshwater conservation project outcomes (in a future phase of project funding).

In FY14, CI and TNC will work closely with AWF, WWF, WCS and other ABCG members to conduct the following illustrative activities:

- Develop a workshop meeting agenda and background materials, and determine dates, ideally in January or February 2014, with input from ABCG and the InterAction WASH Working Group. Draft agenda and invitations will be sent two months prior to workshop event (approximately April 2014).
- Host a three-day workshop for 20-25 field-based conservation and development professionals, donors and private sector representatives to develop draft indicators as part of workshop output, in Nairobi, Kenya under the leadership of AWF. June - July 2014.
- Circulate the draft indicators widely for comment among ABCG and other collaborators in Africa and incorporate feedback into guidelines.
- Finalize indicators by October 1, 2014 and disseminate to audiences in Washington, DC and in Sub-Saharan Africa via ABCG listserve, seminars, and other knowledge sharing platforms such as the InterAction WASH working group and the PHE Toolkit.

Outcomes and Deliverables

- Workshop—June/July 2014
- Workshop report—30 days after workshop (approximately July/August 2014)
- Draft indicators for dissemination—August 2014
- Final revised indicators—September 2014
- ABCG webinar and launch event to disseminate finalized indicators—September 2014

Task H: Forecasting and Analyzing Conservation Needs and Building Capacity on Critical Issues

Level of Effort:

FY2014 USAID Funds: $101,889

Goal:

To analyze future issues that will impact biodiversity conservation in Africa and help develop capabilities of USAID and African partners to address these issues.

Objectives and Activities

It is important to forecast future conservation needs and opportunities in Africa in order to prepare partners to address critical and emerging issues and linkages. Future ABCG meetings and workshops will be planned on key cutting edge issues such as disasters and humanitarian relief; the impact of invasive species on biodiversity in Africa; marine fisheries; freshwater conservation efforts; conservation finance mechanisms; fire and climate change; growing bushmeat trade; use of adaptive management planning; biosecurity; biotechnology and agriculture; the role of conservation NGOs in law enforcement and human rights; developments in technology and implications for conservation work; improving conservation linkages with the African Diaspora in the US; and social impacts of conservation. Based on information gathered and linkages with different sectors recognized, ABCG partners may conduct analysis on new threats, opportunities, and forward-looking issues.

Task H.1: Large-Scale Land Acquisitions

Level of Effort:

USAID FY2014 funds: $106,573

Background:

Governments, corporations, local elites and other actors in many African countries are acquiring large tracts of land for various purposes, especially for agricultural investments

(*e.g.*, food, biofuels and fiber). Much of this land is held by communities either under statutory or customary tenure arrangements. While all types of community land is threatened, community land held and managed as common property (*e.g.*, commonage such as forests and pasture) is under considerable greater threat than community land that is occupied and used (*e.g.*, homesteads and farms). Community land held as common property is also frequently that land which is critical to biodiversity conservation, serving as dispersal areas and migratory routes for wildlife.

Given the importance of land outside the protected estate for biodiversity conservation and the interest of many communities to maintain and secure their common property, this is an important arena for ABCG engagement. In particular, ABCG can play an important role in better understanding how land is acquired by investors for agricultural purposes, and in developing policy options and recommendations to strengthen community land rights, especially over commonage land.

Objectives:

WRI's FY14 work on large-scale land acquisition has three objectives:

- Develop a better understanding of the procedures by which community land is acquired by agricultural investors, especially opportunities for local engagement in the process;
- Develop policy options and program recommendations designed to provide greater and more meaningful participation of rural people in land acquisition decisions; and
- Sensitize governments, corporations, civil society organizations, communities and other stakeholders to the land acquisition procedures and the rights/opportunities for local engagement.

The documentation of the formal in informal land acquisition procedures is important in itself since many communities and rural people are not familiar with the processes or their rights. WRI, however, will focus specifically on understanding the procedures from the perspective of "access" rights, such as the rights of access to participation, access to information and access to recourse. Increased local engagement in the acquisition of community land by investors can lead to more informed discussions about the merits and consequences of the loss of community land, and better decisions that reflect the long-term needs and interests of the communities.

Activities:

WRI will conduct policy research on the processes by which land is acquired by agricultural investors in two African countries, possibly Tanzania and Mozambique (the countries will be selected after some preliminary research is conducted on the procedures). The focus of the research will be on the procedures for acquiring community land (including community land held under statutory and customary tenure arrangements). We will also examine the

processes for acquiring land held under other tenure arrangements, including state land and freehold land, principally for comparative purposes. In addition, WRI will examine national laws for public participation, access to information and recourse that have implications for land acquisition procedures, but may not be formally recognized in the regulations and guidelines that establish the procedures (e.g., Freedom of Information Act, Administrative Procedural Act and other laws). And we will assess the access and procedural provisions in relevant international instruments, such as the FAO *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*.

Deliverables:

This work will deliver four products:

- A written report that documents the research findings and recommendations
- A set of graphics of the land acquisition procedures and the opportunities or citizen engagements (these graphics can be used in written documents, PowerPoint presentations and posters)
- A slide deck and PowerPoint presentation on the research findings and recommendations
- At least one presentation on the research findings and recommendations (venue TBD)

Task H.2: Delivering a SMART tool to improve and report effectiveness of biodiversity conservation investments in Central and East Africa

Level of Effort:

FY2014 USAID Funds: $211,341

Background

Conservation of biodiversity in public, private and community lands requires: a) the formulation of institutions or norms that regulate access to, and use of, natural resources; and b) enforcement of these rules and regulations. In many countries enforcement of laws designed to conserve biodiversity is weak. As a result, biodiversity is being lost at an unrelenting pace[7]. Failure to enforce laws in many public, private and community protected areas is a result of several contributing factors, among which are: 1) insufficient staff dedicated to law enforcement; 2) law enforcement staff lack the skills, experience, information and motivation needed to plan and implement law enforcement efforts; and 3) law enforcement agencies lack the funds to cover the costs of implementing law enforcement plans. A frequent barrier to effective law enforcement is not the lack of staff or funds, but rather the lack of skills, knowledge and motivation to plan and implement successful law enforcement efforts. This is true for national protected area staff as well as community rangers.

To help overcome this barrier the USAID-BATS partners (WCS, AWF, JGI and WWF) propose to build on our collective experience and scale up training for protected area staff to implement effective law enforcement, by demonstrating a new and improved user-friendly software tool to plan, implement, monitor, and adaptively manage ranger-based law enforcement patrols.

Needs and Opportunities

We believe that user-driven development, broad dissemination, and sustained adoption of a new and improved law enforcement monitoring and adaptive management tool,

[7]Hoffmann, M., C. Hilton-Taylor, et al. (2010). The Impact of Conservation on the Status of the World's Vertebrates. Science 10.1126/science.1194442.

underpinned by robust skills training, will significantly help protected area authorities to empower their staff, boost morale, increase efficiency and thus improve biodiversity conservation effectiveness. Furthermore it promotes transparent and credible accounting of the impact of conservation efforts and as such is a great way to promote good governance.

To respond to this need, a global consortium of conservation agencies and NGOs[8] is committed to the development of a new and improved Spatial Monitoring And Reporting Tool, or SMART. The initial focus of this tool will be on law enforcement planning, monitoring, and adaptive management (referred to here as Law Enforcement Monitoring or LEM) in protected areas and other key biodiversity sites. This tool will enhance the effectiveness of ranger patrols by helping managers to utilize data on poaching encounters and other threats to biodiversity, collected as part of the day-to-day work of local rangers. With these data managers will be able to track and assess the impact of patrols on illegal activities and to re-target patrols to focus law enforcement efforts where the threats are greatest.

SMART represents the next generation of law enforcement monitoring tools. It builds on existing systems, such as Cybertracker and MIST, adding enhanced usability, functionality, and scalability that will ensure its relevance across a broad range of regional languages and contexts around the globe. SMART is open-source, non-proprietary and is being driven by the conservation community as a whole. SMART is the realization of a highly consultative process that has, over the past three years, succeeded in engaging a diverse group of relevant stakeholders from across Africa and Asia with a common goal of improving the effectiveness and accountability of law enforcement efforts. Through this process we have elicited and coordinated input from a broad range of experienced end-users of existing LEM systems. A Steering Committee of founding members of the SMART consortium has been established and a Charter to guide its governance is in preparation.

The first public version of SMART Version 1.0 was launched in February 2013. Following this release - and under the first year of ABCG-BATS support—we conducted two introductory technical workshops for SMART users in Central Africa and East Africa in March and May, 2013 respectively. These workshops succeeded in leveraging considerable government interest and engaging new partners to the SMART approach. Over the past six months, the SMART Partnership has been formally testing SMART 1.0 in a number of demonstration sites across Africa (and Asia and Latin America). This has provided formal feedback and bug reporting which has greatly improved functionality and usability of SMART. As a result, SMART 2.0 is scheduled for release in December 2013. This will fix a number of identified issues in the earlier version and add important new functionality: namely a mobile data gathering plug-in (SMART-Cybertracker) that will allow field collection and automated upload of SMART data from Android/Windows Mobile-enabled

[8] Founding members of SMART are: Wildlife Conservation Society, World Wildlife Fund, Zoological Society of London, UNEP/CITES-MIKE (Monitoring Illegal Killing of Elephants), Frankfurt Zoological Society, North Carolina Zoological Park

hand-held devices. Under this second year of USAID-BATS support, we therefore propose to build on the momentum generated during FY13 by conducting an initial refresher and quality control training for SMART trainers in the new functionality of SMART 2.0 and then focusing on providing site-level support for SMART implementation in a suite of demonstration sites where ABCG partners are currently actively supporting, or planning to support, SMART implementation. Finally, we will host a lessons-learned workshop for SMART partners towards the end of the second year of implementation in order to develop best practices for SMART implementation and adaptive management in protected areas.

Activities

With the support of the USAID-BATS we will: 1) demonstrate implementation of SMART across at least 5 sites within Central and East Africa; 2) build a cadre of well-trained SMART users within Central and East Africa motivated to sustain use and encourage further adoption of SMART; and 3) build a constituency for rigorous and transparent accounting of conservation effectiveness.

Five sites (encompassing Gabon, Tanzania, Kenya, Congo and Democratic Republic of Congo) have been selected within Central and East Africa where ABCG partners have a) active project(s), b) are working with national law enforcement authorities, or other formal management groups; c) have the resources to support patrolling and law enforcement using SMART, and d) have full-time technical staff present at the site to provide guidance and oversight. All of these demonstration sites have previously attended the SMART technical training workshops hosted in the first year of this project.

Objective 1: Build regional capacity and coordination in SMART implementation

Activity 1.1: Conduct refresher training-of-trainers for SMART 2.0

A 3-day refresher-training workshop will be held (exact location to be confirmed) for regional and national-level trainers on SMART 2.0.

Under USAID-BATS, regional SMART trainers /focal points, identified through each of WCS, WWF, AWF and JGI, representing the demonstration sites will be trained. The training workshop(s) will be hosted through the wider SMART Partnership and additional ABCG partner participation will be coordinated through WCS.

The training will provide a refresher course for SMART focal points from the region who already received training on SMART 1.0 with FY13 ABCG support. The course will cover new functionality under SMART 2.0 – specifically mobile data gathering and cross-conservation area analysis.

Objective 2: Build and mentor site-level capacity in implementing SMART

Activity 2.1: SMART focal points to conduct follow-up site-level ranger training in each of the five sites

After receiving training, focal points from each team will be responsible for follow-up site-based training, including intensive training of rangers in SMART data collection protocols and oversight of implementation of SMART ranger patrolling for 8-12 months.

In Tchimpounga Nature Reserve SMART implementation will be integrated as part of ongoing monitoring capacity building efforts. This will include linking SMART with a new mobile data collection app called Open Data Kit (ODK) running on Android tablets and using imagery provided from Unmanned Aerial Vehicles (UAV). A consultant will work with JGI and the ABCG partners to explore the feasibility of developing an ODK plug-in for SMART. If successful this will give SMART more flexibility in scaling up and integrating with other mobile data collection monitoring systems in addition to Cybertracker.

Activity 2.2: Conduct 6-monthly follow-up visits by SMART focal points to demonstration sites

Following implementation, the responsible SMART focal point will re-visit their sites at regular intervals (e.g. 6-months) to assess progress, troubleshoot any problems during the testing phase and evaluate data quality and collect feedback to inform further improvements in SMART. Communication between the partners across the five demonstration sites will be maintained during this period.

Objective 3: Disseminate lessons learned and best practices for SMART implementation

Activity 3.1: Conduct lesson-learned SMART seminar

After at least 6 months of SMART implementation in the demonstration sites, three trained management and one technical staff person from each site (and other participating sites) will participate in a 3-day lessons learned workshop (location to be determined). The outcome from this workshop will be a series of best practices for SMART implementation in the region and the purpose will be to encourage broad uptake and adoption of SMART best practices beyond the initial demonstration sites. Furthermore this will allow partners to share and receive feedback from field users on the use of SMART under 'real' field conditions which will guide further developments as a form of adaptive management to the SMART Partnership and existing 10 year business plan.

Table 1. Gantt chart for SMART ABCG-BATS—Year 2

Activity	2013		2014											
	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Objective 1														
Release SMART Version 2.0		■												
Refresher training for SMART 2.0				■										
Objective 2														
Site-level follow up visits/implementation in demo sites				■	■	■	■	■	■	■	■	■	■	■
Site-level ranger training				■	■	■								
Objective 3														
Lessons learned workshop									■					
Publish and disseminate SMART best practices												■		

Outcomes and Deliverables

- One manager and 2 technical staff, and minimum of 15 park staff from 5 sites across Central and East Africa trained in the use of SMART 2.0
- SMART 2.0 demonstrated across at least 5 forest and savanna sites across Central and East Africa, with measurable improvements in law enforcement performance monitoring
- Best practices for SMART implementation developed and disseminated
- Open Data Kit plug-in development initiated for Android tablets and smart phones
- An African users and trainers network with access to a web-based collaboration space for sharing ideas, updating training materials, guiding development of SMART, and encouraging adoption and sustained use of to tool is established and functional.
- Engagement and capacity of government, and non-government agencies to implement a standardized and transparent approach to the monitoring, evaluation and reporting of law enforcement efforts is enhanced
- At least three national governments adopting SMART as a protected area management and law enforcement monitoring platform by project end.

Task H.3: Western Indian Ocean

Level of Effort:

FY2014 USAID Funds: $138,956

Background:

The countries of the Western Indian Ocean (WIO) Region are among the most vulnerable to climate change and variability in the world. The region's coastal and marine resources and the communities that depend on these resources for food, water, and livelihoods are particularly sensitive to climate impacts. Climate impacts due to increasing air and sea surface temperature increases, precipitation changes, increasing frequency and severity of extreme weather events, and sea level rise are compounded by concerns about ocean acidification due to elevated levels of atmospheric carbon dioxide.

The WIO region is characterized by economies and livelihoods that are highly dependent on their natural resources, primarily for fishing, tourism and shipping. Approximately 30 million people in the WIO depend directly or indirectly on the coastal environment for goods and services (MENRT—Seychelles, 2009). Without taking into account the impacts of climate change, the region is already suffering from pressing development issues such as poverty, overfishing, food security and environmental degradation which threaten the economic sectors mentioned above and the livelihoods of its people. Climate change will exacerbate existing social and environmental issues and present an additional challenge for the sustainable development of the region due to sea level rise, coral bleaching and the livelihoods of coastal communities that depend on local fisheries for food security.

Responding to climate change will require the integration of adaptation into all aspects of policy development (Watkins, 2007). Islands and coastal zones throughout the world are receiving growing attention not only for vulnerability to climate change and their important natural resources and, but also for their potential as demonstration models of sustainable development. Many island and coastal countries have started exploring new solutions to take action on adaptation. Within this context, the WIO region can become an example on how to integrate climate change adaptation, ecosystem management, clean energy and sustainable livelihoods.

Through regional frameworks such as the Nairobi Convention and Indian Ocean Commission, integrated management of coastal and marine resources has been identified as a common concern for all the south west islands of the Indian Ocean and the coastal countries of East Africa. The marine and coastal ecosystems of these countries share common characteristics. Their respective coastal environments are under similar human pressures and are experiencing the effects of similar natural phenomena in the region,

including climate change, the influence of marine currents at the south of the Equator and the impacts of monsoon winds or cyclones which particularly affect the island countries. Collaboration between institutions, information exchange and the sharing of experience and resource management tools will enhance regional cooperation and economic integration.

Given the general weaknesses in terms of environmental governance in the WIO region, the Governments thereof urgently need to be supported (and have asked for support) so that they would be able to develop common vision and strategies to address appropriately the cross-cutting impacts of climate change. The Governments of WIO countries are still indeed facing diverse urgent priorities and are not yet able to overcome short-term priorities when dealing with environmental and natural resource management issues. In this context, ABCG's collaborative work fits well with the need of support that the WIO State actors are looking for, and especially when ABCG's mission is to tackle complex and changing conservation challenges by catalyzing and strengthening collaboration, and bringing the best resources from across a continuum of conservation organizations to effectively and efficiently work toward a vision of an African continent where natural resources and biodiversity are securely conserved in balance with sustained human livelihoods.

Needs and Opportunities

In a response to the above described context, the nation states of the region (led by Seychelles) are in the process of launching the "**Western Indian Ocean Coastal Challenge**" (WIOCC) to mobilize political, financial, and technical commitments and actions of WIO countries at regional and national levels focused on climate change adaptation, promoting resilient ecosystems, sustainable livelihoods and human security within a 20 year vision. This initiative builds on the efforts of the Nairobi Convention, WIO/LaB Strategic Plan, and the Indian Ocean Commission's efforts to put into place Integrated Coastal Zone Management Action Plans and Locally Management Marine Areas (LMMA) at the country level. The proposed overall goal is: **"Coastal economies and communities are sustained by safeguarding the region's vulnerable marine and coastal ecosystems".**

As the WIOCC is a country-driven regional initiative, WIO partners commonly acknowledge that a state ownership of a regional initiative that tackles the highest priority cross-cutting threat (climate change) of the region is crucial to foster a genuine regional cooperation to move towards an effective call for action. Toward this end, the Consortium of the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean (WIO-C) in partnership with inter-governmental organizations is now officially committed to provide technical support to the WIOCC as per an MoU (between WIOCC and WIO-C) signed during the 3rd WIOCC technical meeting in Seychelles in July 2013. Within the WIO-C, the partner organizations TNC, WCS, WWF have directly supported WIOCC initiatives through the ABCG. The objective being to align, harmonize, and move forward marine and coastal management activities within the context of a regional and country level framework.

The WIOCC is led by the Government of Seychelles, which remains committed to leading the operationalization of the Challenge by progressively engaging political leaders at the highest level in the region in to make tangible commitments to launch it. The European Union is still providing support to the Challenge through Indian Ocean Commission ISLANDS Project. Since launching the WIOCC initiative in 2012, significant progress has been made in anchoring the WIOCC within the region, including the commitment of several countries to participate in the formal launching the WIOCC at the UNSIDS conference planned for 2014. Seychelles and Mauritius have agreed to launch the WIOCC during the UNSIDS 2014 meeting, and Comoros and Madagascar have expressed agreement for this and are willing to join the delegation for Samoa. In further support, the Nairobi Convention COP7 has endorsed a decision (Decision CP7/16) on the Western Indian Ocean Coastal Challenge that requests parties and other partners to support and encourage participation in the WIOCC. All this constituency building is strengthened by the successful establishment of the WIOCC Communications Working Group, which has developed the WIOCC Communication Strategy, while the scoping for the establishment of a regional trust fund was achieved and will form a mechanism to provide sustainable financing to support achievement of the WIOCC commitments.

Most recently, the WIO-C/WWF led Mozambique Channel Initiative has been presented to the WIOCC behalf of the WIO-C and Secretariat of the Nairobi Convention Secretariat. The Mozambique Channel area, and particularly its northern part, has been recognized by several additional key entities (COI, UNESCO, EBSA/CBD, GPO) as having a global importance in terms of marine and coastal biodiversity and natural resources. This area is ecologically, oceanographically and geologically unique and it has substantial opportunity to sustain countries' sustainable development particularly considering current and upcoming exploitation of globally important oil and gas reserves, associated shipping operations, as well as demand for fisheries resources both for export and to feed the growing local population. This partnership approach seeks for an effective integrated ocean management where all key marine sectors use the maritime space in a coherent and sustainable way. It was proposed that the WIOCC could be used as an umbrella partnership to move related dialogues forward. Opportunities should also be leveraged with the Global Partnership for Oceans (GPO).

Continued support from ABCG within the WIO, through direct intervention from TNC, WCS, WWF will focus on ensuring that technical focal points from the mainland states of Kenya, Tanzania and Mozambique, as well as high-level government officials, continue to engage in and further their commitment to the WIOCC process. Further to this, targeted activities that address (i) economic valuation of climate change impacts, (ii) sustainable finance mechanisms, and (iii) marine/coastal habitat assessment and data management targeting coral reefs will be advanced. The cumulative outcomes of these targeted activities will bring added value and further leverage to the role that the WIOCC will play in the WIO. Objectives of this continued support include:

- Continue to engage the mainland states of Kenya, Tanzania, Mozambique, at both the technical and political levels, in their commitment to the WIOCC;
- Ensure collective efforts (between WIOCC and WIO-C) on matters of common interests, such as the economic valuation of climate change impacts; and
- Provide a geographical focus (not exclusive), the Northern Mozambique Channel, to the WIOCC, notably when it is the richest area of the WIO.

Activities and Outcomes

For the side of the SIDS countries and territory (Comoros, Madagascar, Mauritius, Seychelles and Zanzibar), the Islands Project is funding all activities for operationalizing the WIOCC. We propose to complement these efforts by orienting ABCG support towards the mainland states of Kenya, Tanzania and Mozambique and reinforcing linkages between WIOCC and regional initiatives within the Nairobi Convention. For this group work plan, ABCG proposes the following activities:

1. *Undertake country level economic valuation of CC impacts in relation to food security and economic development for the 3 East Africa mainland states.* This will serve to complement the WIOCC activity 2.4.8 for islands states (country level economic valuation of CC impacts), and should formulate in the combined regional report the cost- effective adaptation measures and the recommendations from national-level economic valuations. *To be implemented by WWF*

2. *Continued support to development of a Conservation Trust Fund / sustainable finance and resource mobilization mechanism for the WIOCC.* This will serve to complement the WIOCC activity 2.4.6, which aims to develop a WIOCC fundraising and donor strategy/resource mobilization plan. WCS has been assisting the WIOCC to evaluate options and opportunities to finance the implementation of its Mission and Vision. In moving forward it will be important for the WIOCC to determine the purpose of any conservation fund in order to raise and invest money to meet its objectives. The WIOCC has an expansive mandate related to the sustainable management of coastal and marine resources. The programmatic and geographic scope makes the need to focus particularly important and developing a mission for the fund will be one of the first steps. WCS will assist this process by working with the Secretariat and a core group of participating partners to refine the mission of the Fund and strategic selection of a steering committee. The Steering Committee can then begin to focus on the types of activities that the Fund might support and even discuss the geographic scope. *To be implemented by WCS*

3. *Support travels with awareness raising purposes to WIOCC technical focal points and high-level Government officials (minister-, director-level) of the 3 mainland states.* These travels serve to underpin the realization of 'Preparatory meetings for the launch of the WIOCC' during which awareness of high-level Government officials of the 3 mainland states is raised by

different personalities closely involved with WIOCC. These travels also directly support the engagement of technical focal points from these mainland states in WIOCC technical meetings. These meetings also form an important step for the WIOCC for defining its preliminary goals and targets with the director- and minister-level of respective Governments. This activity will also ensure that islands and mainland countries are committed to create and effectively participate in the WIOCC and that international technical and funding agencies are committed to aligning to the WIO-CC priorities. Finally, this support is crucial in terms of allowing WIO-C/WWF members to hold strategic discussions with high-level Government officials on the (Northern) Mozambique Channel initiative. *To be implemented by WWF and WCS*

4. *Support the Government of Seychelles to expand its Marine Protected Area, a strategic step to leverage similar initiatives in the region.*

   Upon request from the Government of Seychelles (GoS), The Nature Conservancy is bringing its conservation finance and its marine spatial planning expertise to assist the GoS complete a debt for climate change adaptation swap which will fund the creation and management of an expanded marine protected area in the Seychelles.

   Under the proposed arrangement, Seychelles would commit to protecting 400,000 sq. km or 30% of its EEZ (currently only 1% is protected) and half of that as no-take zones (15% of EEZ), in exchange for a very favourable renegotiation of its external bilateral debt. The government of the Seychelles will also agree to make debt service payments to a newly created trust fund, which will use these payments to pay for conservation initiatives, rather than the government continuing to service the original loans with its creditors. Some $1.9 million (payable in equivalent local currency) of the principal and interest payments will be used annually to finance adaptation to projects in Seychelles. More specifically, programmes will involve: (i) expanding and improving management of marine protected areas and replenishment of no-take zones; (ii) developing and/or improving coastal zone management, fisheries, and marine policy and regulatory protection regimes; (iii) coral and mangrove restoration projects; (iv) provision of alternative livelihoods for affected users; (v) improving social resiliency to climate change; and (vi) developing a comprehensive Disaster Risk Reduction strategy for the Seychelles marine coastal system. Another $1 million (payable in USD) annually will be used to capitalize the endowment.

   Seychelles continues to be the champion of the WIOCC. Their commitment and enthusiasm could leverage marine protected areas creation and / or expansion in other states in the WIO region, in turn, fulfilling their commitments to Aichi target 11 under the Convention on Biological Diversity, “By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected

systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape".

In addition, supporting Seychelles in the MPA process parallel to its ongoing successful tuna industry and other economic activities such as increased prospecting for oil and gas offshore, will demonstrate how marine spatial planning can help other states in the region balance economic development and conservation needs especially among states recently proven to have huge reserves of oil and / or gas offshore e.g. Tanzania, Mozambique and Kenya.

5. *Improve awareness among WIOCC technical focal points and high-level Government officials of the three mainland states and garner support for the WIOCC launch in 2014 among WIOCC members.*
   This activity will support awareness-raising among high-level Government officials of the three mainland states, especially Tanzania that is currently chair to the Nairobi Convention. It will involve travels to WIOCC technical meetings to define preliminary goals and targets for the WIOCC launch with the director- and technical-level of respective Governments. *To be implemented by TNC, in support of Activity 3 implemented by WWF and WCS*

Deliverables

- 2 consultative workshops realized – second quarter and third quarter of FY14 to:
  - Complete resource use mapping
  - Identify conservation features, goals and determine costs
  - Review draft design and provide feedback for incorporation
  - Approve final design using a customized post analysis tool
  - Disseminate methodology and training in the design and analysis used.
- Terms of reference and documentation from technical meetings held with mainland countries on WIOCC preliminary goals and targets.
- Terms of reference and documentation from meetings held with high-level government officials.

Outcomes

- Country-level recommendations from economic valuation and cost-effective climate change adaptation measures are formulated. WIOCC evaluation-lessons learnt document include mainland states' findings.
- The three mainland states of Kenya, Tanzania and Mozambique demonstrate technical literacy in WIOCC strategy and are effectively engaged in WIOCC through participation in the WIOCC definition of goals, objectives and targets.

- The three mainland states of Kenya, Tanzania and Mozambique are aligned with WIOCC implementation and demonstrate effective engagement in WIOCC strategy through elaboration of WIOCC commitment statement and documentation. An increased number of partners, including NGOs and international organizations are aligning to WIOCC implementation.
- A sustainable finance and resource mobilization mechanism is developed and validated for the WIOCC.
- The mainland states' high level Government officials commit to discussion about engagement in (Northern) Mozambique Channel Initiative.
- The three mainland states of Kenya, Tanzania and Mozambique demonstrate technical literacy in WIOCC strategy and are effectively engaged in WIOCC through participation in the WIOCC definition of goals, objectives and targets.
- The three mainland states of Kenya, Tanzania and Mozambique are aligned with WIOCC implementation and demonstrate effective engagement in WIOCC strategy through elaboration of WIOCC commitment statement and documentation. An increased number of partners, including NGOs and international organizations are aligning to WIOCC implementation.
- Foundation for expansion of MPA in Seychelles

Task H.4: Faith and Conservation

Faith-based communities comprise the largest social organizations in Africa, representing a repository of opportunities to spread the cause for sustainability in the continent. Conservation leaders should reach out to religious communities to collaborate in implementing these recommendations, with a view to enhancing the capacity for value-based sustainability decisions that link nature and human well-being.

- Dar Vision on the Future of Biodiversity in Africa

Level of Effort:

FY2014 USAID Funds: $80,879

Collaborating Organizations:

The Jane Goodall Institute, World Wildlife Fund-US, Alliance of Religions and Conservation

Background

Religious faith plays an enormous role in the lives of people around the world, helping to provide an understanding of the world around us and lighting a moral path to follow in times of uncertainty, need or joy. The intersections of faith and conservation are an important element of the Dar Vision on the Future of Biodiversity in Africa, in which experts from throughout Africa came together to articulate multidimensional approaches to biodiversity conservation in Africa. Recently, the Biodiversity Analysis and Technical Support program of USAID's Africa Bureau commissioned a report on religion and conservation in Africa. This work, From Practice to Policy to Practice: Connecting Faith and Conservation in Africa, was written by Amy Gambrill of IRG, which explores some of the current practices of connecting faith and conservation, provides information on some of the faith groups doing conservation work, and presents several case studies on faith-based conservation. ABCG held a thematic meeting in June 2011 to discuss opportunities, challenges and examples of conservation and faith groups working together.

In September 2012, twenty-seven long-term plans of action on the environment were launched by Christian, Muslim and Hindu faith groups in Sub Saharan Africa. These plans had been drawn up over the previous 18 months and focus on education and sustainable land and water management in an initiative pioneered by The Alliance of Religions and Conservation and supported by the Norwegian Government and the World Bank.

The meeting to launch the long-term plans was also supported by ABCG with funding from USAID.In 2014, ABCG members the Jane Goodall Institute and World Wildlife Fund-US as well as UK NGO the Alliance of Religions and Conservation, will continue to work together and with faith groups in Africa in the areas of environmental education and wildlife trade.

STRATEGY ON ILLEGAL WILDLIFE TRADE

Possibly the most immediate challenge for conservation in Africa is that of illegal wildlife trade, which threatens the very survival of wild populations of species such as elephants and rhinos. The most significant volumes of illegal international wildlife trade flow from Africa is to Asia, in particular that of elephant ivory and rhino horn. The demand for these products is so great that the impact on wild populations is staggering: rhino poaching in South Africa increased by more than 3,000% between 2007 and 2011 and up to 12,000 elephants are killed each year for their ivory, most in Central Africa, all headed for Asian markets. Given the critical emergency that we face currently, WWF and ARC will raise awareness among African faith leaders about illegal wildlife trade in Africa, and specific regions, and the importance of protecting endangered species.

Alliance of Religions and Conservation (ARC) and the Jane Goodall Institute

One focus of the long term plans is education and work in schools. ARC has developed a toolkit on 'Education for Sustainable Development' for faith schools which integrates faith values into teaching about the environment. This was launched in Kenya in July 2013 with the Kenyan Organisation for Environmental Education who have been the key partner body. The toolkit is supported by TerrAfrica, The Kenyan Ministry of Education, UNEP Regional Office for Africa, the National Environment Management Authority of Kenya, the Christian Churches' Education Association of Kenya, The Catholic Secretariat of Kenya, the Hindu Council of Kenya and the Supreme Council of Kenya Muslims.

This toolkit recognises that integrating faith values into teaching about the environment is a powerful motivator for action. In addition, focusing on school children is also key to bringing about behavioural change in the community- as well as having the potential to bring about an immediate impact on children's health and particularly on girls' health and education.
The toolkit addresses 5 main themes including biodiversity, sustainable agriculture, energy, waste and water. It also has a practical component with an emphasis on WASH activities (Water, sanitation and hygiene) in schools and the setting up of eco-clubs and demonstration sites on how to grow food, improve farm practices or how to set up water harvesting. This is not a manual to sit on shelves- but a process where teachers are involved in its development and trained in its use and where pupils and their families are actively engaged in hands on environmental activities. The toolkit also contains a section on wildlife and the importance of

wildlife protection which arose from the March 2012 conference. This was furthered when the commitments to oppose the illegal wildlife trade first made at the September 2012 launch of the long term plans were presented to HRH The Duke of Edinburgh at a meeting at Buckingham Palace in February 2013.

In September 2013 the toolkit will be presented as a model to faiths groups, NGOs, government representatives and educators in Tanzania - a country where the Jane Goodall Institute has been running an environmental education program that includes the development of resource materials for use in-classrooms and madrassa or Islamic schools through Goodall's Roots & Shoots, an extra-curricular program for youth. A visit by Mary Bellekom from ARC to Tanzania in May 2012 explored JGI's work in Tanzania, visited field programs and discussed with JGI partners from both government and Muslim schools and gained a deeper understanding for JGI's work in Tanzania and the opportunities for collaboration. This has been followed by visits by Dr. Dorcas Otieno in June 2013 and August 2013 when she and Erasto Njavike from JGI met with faith groups, government groups, NGOs and other relevant bodies in Tanzania. Together with Mary Bellekom at ARC they have developed the programme for a two day September 2013 conference at which between 100 to 120 people will attend, potentially including the President of Tanzania.

The 2 main resources components that will be developed for their potential use throughout Tanzania are the ESD toolkit for faith schools and Environmental Education materials developed by the Jane Goodall Institute following guidelines established by the Ministry of Education.

These 2 resources will compliment and support each other.

Activities

The next steps following the September 2013 Tanzania meeting will be to

1) offer ongoing training to Faith groups and teachers in Tanzania
2) assist in the adaptation of material for Tanzania and printing copies for distribution
3) conduct a rapid assessment on the use of the toolkit/resource materials by school and madrassa teachers and incorporate feedback
4) organize a similar event in 2014 in Uganda.

Representatives from Uganda will attend the Tanzania meeting in September 2013 and this will also tie in with the World Bank funded ARC project in Uganda of developing a Faiths Council to work as a partner body with the Ugandan Government on sustainable development and climate smart agriculture.

During late 2013 and into 2014 visits will be made to Uganda to coordinate the planning of this conference in association with JGI through their Roots and Shoots programme and through the KOEE links with Eco-Schools as well as ARC's network of faith groups with their educational

establishments. The conference in September 2014 will launch a similar ESD toolkit program to that developed in Kenya and launched in Tanzania in 2013.

As a follow-up to the September 2012 conference in Nairobi, JGI has continued discussions with Bishop Kyamanywa Nathan of the Bunyoro Kitara Diocese to see how synergies can be established. JGI has a number of conservation programs in the Bunyoro Kitara area, an area with a high chimpanzee population. These conversations will be deepened in the next year and we will identify concrete ways of working together in areas of mutual interest. We will also work towards raising additional funds to select four pilot schools in Uganda where the toolkit will be piloted in partnership with the relevant Government bodies coordinated through the new faiths Council where appropriate..

Deliverables & Outcomes:

Output:

Meeting report that outlines steps that will be taken by ARC, JGI and partners to implement development of the Tanzania toolkit and introduce EE into faith schools in Uganda and which explores how to further develop EE materials already available.

Outcome:

Relationships between faith based organizations and conservation organizations continue to be developed and deepened to achieve shared goals in environmental conservation.

By having developed this work in 3 countries in East Africa we can show the regional significance of faith based environmental education and f provide a model for region based development in all parts of Africa

WWF Sacred Earth

Part of the prevalence of illegal wildlife trade is due to the lack of recognition that wildlife trafficking is a serious crime, which negatively impacts local communities, economies and governance. Moreover, most people are conditioned to believe that wildlife is an exploitable resource that is historically or culturally acceptable as a way of life. By working with faith leaders and religious groups in Africa, WWF Sacred Earth joins ARC and JGI in galvanizing efforts to change behavior in the source and demand countries.

In 2012, WWF and ARC developed a partnership to work with faith groups in Central and East Africa on wildlife trade issues, which led to over 50 major faith traditions signing commitments to work against the illegal wildlife trade. The follow up to this unprecedented event has been a special co-funded project, with the Education for Nature program (EFN) at WWF US, led by the Catholic Church in Kenya to train and educate their clergy in every Kenyan diocese and reach out to other faith institutions, including the Supreme Council of Kenya Muslims, which has been partially implemented already and will be completed in the next four weeks.

WWF proposes a two-prong approach for the next phase, focusing simultaneously on harnessing religious influence in the Democratic Republic of Congo, one of the key source countries for the blood ivory and replicating the religious partnership spearheaded by the Catholic Church in Kenya with the Islamic Council in Tanzania. This would require the following activities:

Activities

Activity 1:

A research study to assess whether religious influence could lead to significant behavior change in DRC, especially an increase of conservation ethics and desire to protect African elephants and other species. This would be led by WWF staff in DRC/ consultant in the US.

Activity 2:

Develop partnership with the Islamic Council of Tanzania to replicate the project activity in Kenya and lead a (multi-faith) training and education program that will integrate wildlife protection commitments within the Islamic institution and other faith groups. Steps include:

Integration of conservation values

- Develop a curriculum that merges wildlife protection and biodiversity information with religious values that can be shared.
- Build upon existing internal events and meetings within the Council/ mosques and begin training
- Organize a training workshop where the main output will include a statement that can be elected to spread the information through the many mosques in the country

Activity 3:

Continue with wildlife protection training (through EFN support) in Kenya in partnership with ARC.

If feasible, WWF will work with Jane Goodall Institute while developing and implementing activities in Tanzania. Following the analysis of religious engagement in the Congo, WWF would like to discuss with ARC and JGI, and present the findings to the ABCG.

ARC

ARC has pioneered a new dimension to this work which is an African Religious Leaders and Chinese Religious Leaders partnership. Using the ARC meeting in Trondheim, Norway in July 2013, African and Chinese religious leaders were able to meet and to agree to create a partnership between their communities. In particular this partnership is being headed by the Catholic Church in Kenya, the Supreme Council of Kenya Muslims and the Qadiriyyah Movement of Nigeria.

Activities

Plans now involve:

- Chinese and African religious leaders working together to make a PSA with WildAid to be broadcast in China and in Africa;
- joint visits, starting with Chinese religious leaders visiting Kenya and possibly Nigeria to see first hand the impact of TCM driven illegal wildlife trade on the biodiversity of key areas in Africa;
- the making of a documentary to record this and its impact on the Chinese religious leaders;
- a social media program in Chinese directed in part towards the Chinese expatriates in Africa;
- shared statements of spiritual concern and plans for action.
- In collaboration with WWF UK to help facilitate sustainable partnerships with environmental organizations concerned with the wildlife trade such as TRAFFIC and with the Forum on Africa and China Cooperation and their meeting in South Africa in 2015.

Task H.5: Emerging Issues

Dar Vision

By 2025, environmental degradation and biodiversity loss in Africa have been significantly slowed, people and nature are adapting to climate change, and species and ecosystem services are providing a foundation for human welfare in a society committed to sustainable economic development and equitable sharing of natural resource benefits.

…there are also opportunities which we must seize, building on existing successful approaches to biodiversity conservation as well as new innovation, to take urgent and renewed action. For the great majority of Africans, biodiversity represents the only lifeline that can no longer be ignored.

Level of Effort:

USAID FY14 funds: $125,630

Objectives and Activities

ABCG members work together to identify threats and opportunities affecting Africa's biodiversity and human livelihoods. The objective of this component is to continue to explore emerging issues and communicate findings. We will reach out to partners through ABCG thematic meetings, and presentations and circulation of BATS reports to highlight that biodiversity remains the fundamental basis of Africa's development, and underpins the well-being of current and future generations. This work is closely linked to the work on the Dar Vision (component A). ABCG thematic meetings will continue to further identify emerging issues impacting conservation in Africa, and will help inform USAID and African partners of new threats or potential opportunities requiring their attention.

Activities

In FY2014, ABCG will;

- Promote dialogue on emerging issues, with a view to directing the focus of the ABCG constituents and the conservation and development community at large towards proactive responses to an evolving conservation landscape.
- Organize at least 4 ABCG thematic meetings in Washington DC, on themes identified as high priority by ABCG members
- Organize and host numerous brown bags with experts on a variety of emerging and high-priority conservation issues

- Organize at least one high-profile international event to highlight ABCG's findings on emerging and high-priority issues
- Further linkages between conservation practitioners in Washington DC and on the ground in Africa through increasing use of technology and new communications tools
- Publish and disseminate reports and summary videos based upon products of other BATS tasks
- Continue to undertake outreach through the ABCG listserv and website on key biodiversity issues in Africa
- Communicate current events through the listserv
- Respond to requests for information and contacts, making connections between people working in similar and complementary fields, and promoting collaboration for ABCG members, USAID and others

Deliverables

- At least 4 ABCG thematic meetings held
- At least 1 international event held
- ABCG website upgraded and migrated to platform, including new materials from BATS publications
- ABCG listserv continued and expanded to communicate information and events about African biodiversity, to audiences in the US, Africa and beyond
- Reports and summary videos published and disseminated

MONITORING & EVALUATION (M&E)

To actively monitor and evaluate the progress of the BATS tasks in a timely manner that will allow for adaptation in the program, the following indicators will be used:

- Number of meetings, workshops, and presentations held on emerging and high priority conservation issues in Washington, DC or at international conferences
- Documentation of research and analysis undertaken by the ABCG partners with the use of resources provided through BATS II, through the publication of reports, scientific papers, policy papers, press releases and other materials
- Level of outreach to the African conservation community through the dissemination of reports and publications, and through presentation of BATS II supported findings in meetings and press
- Amount of technical assistance to USAID field missions and partners

PROGRESS TO DATE

In FY2011, ABCG successfully held **15 meetings/workshops**, **29 brown bag talks, eight outreach events** and other events on various aspects of conservation, from a workshop on ***Managing Extractive Industries to Protect Biodiversity*** to events including ***Optimizing tradeoffs in woodland ecosystems: carbon, conservation and communities*** and ***Clean Energy Technologies for Cooking and Lighting—Barriers and Breakthroughs***; reports including manuals such as ABCG HIV/AIDS and Conservation Manual, and ***The ARC Education for Sustainable Development*** toolkit; and **six policy notes or multimedia briefs**.

ABCG has increased the membership of our listserv from 740 in July 2012 to 1,143 in September 2013, sustaining an average increase of 28 new subscribers per month. Last year we produced six feature articles, and frequent newsletters for a total of 118 individual messages sent in FY2013.

Our Twitter followers have increased by 92%, from 131 followers at the close of FY12 to 252 followers at the close of FY13. On Facebook, our "likes" have increased from 204 at the close of FY12 to 448, an increase of 120%. Our consistency of postings as well as linking to our members and their posts has increased our followers and likes.

SUSTAINABILITY

This project will help USAID/Africa to target future funding and build synergies to promote sound development in Africa, making effective use of Africa's natural resources for positive development while helping to promote improved governance and stability in Africa's current fragile states. Social sustainability will be promoted by increasing focus on the importance of sound governance of natural resources for the benefit of Africa's people. Financial sustainability will be supported through promotion of best practices in extractive industries, promoting comprehensive efficiency of operations in the long term, and helping to internalize more of the external costs of extractive industries in the private sector, rather than leaving them to be borne by poor people without a voice. USAID's long-standing commitment and leadership in supporting biodiversity conservation will help ensure sustainability into the future.

Travel

Travel for ABCG member staff, consultants and others under BATS in FY13 are expected to include the following trips:

Task	Who	Origin	Destination	# Trips
B.2 HCV	WCS—Conservation planning specialist	USA	Central Africa	2
"	WCS—Gabon technical Advisor	Central Africa	USA	1
"	CI—Conservation planning specialist	USA	Central Africa	1
"	USAID representative	USA	Central Africa	1
"	Meeting facilitator	Europe	Central Africa	1
C. Land Tenure	AWF—Conservation Strategy Executive	East Africa	Southern Africa	3
"	JGI Program Director TZ	East Africa	East Africa	2
"	TNC—local training participants	East Africa	East Africa	2
F.1 CC Adaptation	CI—Site Coordinator for data collection	Southern Africa	East Africa	1
"	Conservation Program Manager	Southern Africa	Central Africa	1
"	WCS—Site Coordinator for data collection	Central Africa	Central Africa	1
"	WWF—Site Coordinator for data collection	East Africa	Central Africa	1
"	WWF—Sr. Program Officer–Adaptation	USA	East Africa	1
F.3 Woodlands/Tradeoff	AWF—landscape ecologist	East Africa	East Africa	2
"	AWF—Conservation Geographer	USA	East Africa	1
"	JGI—Conservation Scientist	USA	East Africa	1
"	WCS—Marxan expert	USA	East Africa	2
F.4 Clean Energy	AWF—Climate Change Director	East Africa	East Africa	4
"	AWF— Community Officer			
"	JGI—Project Officers	East Africa	East Africa	2
F.5 Grasslands Carbon	TNC—Ecological modeling partner	USA	East Africa	1
"	Syracuse Environmental Scientist	USA	East Africa	2
"	Syracuse Wildlife Ecologist	East Africa	East Africa	2
"	NRT Subaward—NRT vehicle support for field trips	East Africa	East Africa	1
G.2 WASH & Conserv'n	AWF—Policy Director	USA	East Africa	1
"	TNC—International Institutions Policy Associate	USA	East Africa	1
"	TNC—Program Manager	East Africa	East Africa	1
"	CI—Peace & Development Manager	USA	East Africa	1
H.2 SMART	AWF—Conservation Geographer	USA	East Africa	1

“	WCS—Technical Advisor	Europe	Central Africa	1
	WCS—Conservation Planner	USA	Central Africa	1
H.3 Western Indian Ocean	WCS WIO Program Lead travel	Madagascar	WIO Region	3
“	WCS Conservation Finance Expert	USA	WIO Region	2
“	WCS NFP Madagascar CRN	Madagascar	WIO Region	2
“	WCS CRTF Rep	Kenya	WIO Region	1
“	Coral Reef Network (CRN) Technical Coordinator	Madagascar	WIO Region	1
“	CRN NTF Mauritius	WIO Region	WIO Region	1
“	CRN NTF Seychelles	WIO Region	WIO Region	1
“	WIOCC Technical Coordinator	WIO Region	WIO Region	1
“	WIOCC NFP Mauritius	WIO Region	WIO Region	1
“	WIOCC NFP Madagascar	WIO Region	WIO Region	1
“	WIOCC NFP Seychelles	WIO Region	WIO Region	1
“	Nairobi Convention Rep	East Africa	WIO Region	1
“	WIOCC NTF Kenya	East Africa	WIO Region	3
“	WIOCC NTF Tanzania	East Africa	WIO Region	3
“	WIOCC NTF Mozambique	East Africa	WIO Region	3
“	TNC MPA Experts	USA	WIO Region	2
“	TNC Policy Advisor	East Africa	East Africa	2
“	TNC Policy Advisor	East Africa	Pacific Islands	1
H.4 Faith & Conservation	ARC staff	Europe	East Africa	2
“	Faith leaders (partial support for travel)	West Africa	East Africa	1
“	Environmental education expert	East Africa	East Africa	2
“	WWF Sacred Earth Director	USA	East Africa	1
“	WWF Sacred Earth Director	East Africa	Central Africa	1
“	ARC staff	East Africa	Central Africa	1
	ARC staff	East Africa	East Africa	1

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